



KERALA

1967

**an
economic
review**

CHAPTER I

GENERAL REVIEW

The year 1967 was, in many respects, an year of general crisis in the economic and social life of the Nation. The crisis in planning culminating in the postponement of the Fourth Five Year Plan till April, 1969, and the persisting uncertainty about resources position, both in terms of domestic and foreign resources, marked the beginning of an era of serious re-thinking on basic economic and social policies pursued at the national level. The increasing dependence of India on foreign countries for economic aid and the country's movement away from the cherished goals of self-reliance underlined the gloomy outlook of the economy in 1967.

1.2 In their analysis of the "Economic Trends, 1967-68" the Planning Commission have admitted the fact that atleast certain trends in the Indian economy "should arouse deep concern". In this chapter an attempt is made to analyse the major trends in the Indian economy and their implications to Kerala's economic growth. The developments in Kerala in 1967 in particular sectors such as agriculture, industry, power, transport, export-import trade and social services are reviewed against this over-all background.

1.3 The last few years have witnessed the continuation of serious difficulties in respect of internal as well as external balances of the Indian economy. The shortfall in income both in 1965-66 and 1966-67 dominated the pattern of rising prices and acute stringency. The aggregate production of real goods and services in India declined in 1965-66 compared to the previous year. The national income which in 1964-65 stood at Rs. 16,219 crores (at 1960-61 prices) declined to the low level of Rs. 15,441 crores in 1965-66. Though national income at 1960-61 prices increased slightly in 1966-67, the level of availability of real goods and services in 1966-67 was still lower than that in 1964-65.

National Income During 1960-61 to 1966-67

YEAR	National income		Per capita income	
	At current prices	At constant prices (1960-61)	At current prices	At constant prices (1960-61)
(1)	(2)	(3)	(4)	(5)
1960-61	13453	13453	310.0	310.0
1961-62	14315	14037	322.3	316.0
1962-63	15179	14329	332.9	314.2
1963-64	17563	15101	376.1	323.4
1964-65	20424	16219	427.1	339.2
1965-66	21064	15441	430.1	315.3
1966-67	24157	15706	481.5	313.1

1.4 India's national income at constant price rose by 14% only during the Third Five Year Plan period as against a target of 30% increase. There was substantial failure in agricultural production during 1965-66 because of structural deficiencies in the agrarian structure and the severe drought which created new problems internally as well as for the country's external trade and payments. The increase in industrial production during the Third Plan period was of the order of 44% as against a target of over 55%. Thus, in the major sectors of the economy, there was a definite divergence between Plan projections and Plan performance. The over-all impact of this divergence between objectives and performance is reflected in the rates of growth of national income and per capita income as can be seen from the following table:—

Percentage Increase in National Income and Per capita Income During the Plan Period

	National Income		Per capita income	
	At 1948-49 Prices	At 1960-61 prices	At 1948-49 prices	At 1960-61 prices
First Plan Period	+18.40	+18.48	+8.20	+8.73
Second Plan Period	+21.50	+21.17	+9.50	+9.03
Third Plan Period	+13.80	+12.66	+1.50	-0.30

The decline in the rate of growth of national income and per capita income in India which began in the Third Five Year Plan period should be considered as a serious development in the Indian Economy and a reflection of the basic weaknesses of the Indian economic system.

1.5 During 1965-66 the output in agriculture declined by about 17% as compared to 1964-65. As against 72 million tonnes of

foodgrains production in 1965-66, the output of foodgrains during 1966-67 was 76 million tonnes. The quantity was still below the 89 million tonnes harvested in 1964-65. During the current year, 1967-68, according to the estimates of the Government of India, the level of agricultural production is expected to be substantially higher than even the record production of 1964-65. The production of foodgrains is estimated to be about 95 million tonnes.

1.6 The estimated higher agricultural production during the current year 1967-68, which is based on the assumption of normal weather during the rest of the agricultural year, is expected to play a very crucial role, according to the Government of India and the Planning Commission, in "stabilising" the economy. The Planning Commission notes that "for the time being constraint on overall growth imposed by the set-back in agriculture over the past two years may be loosen".

1.7 It will be wrong, however, to give too much of emphasis on the role which a "bumper crop" of 95 million tonnes is expected to play in "loosening" the "constraint on over-all growth" of the economy. In the absence of a rational Food Policy, particularly in respect of procurement and distribution, and in view of the reluctance of the Central Government to take the responsibility for providing a continuous flow of foodgrains from the surplus States to the deficit States, even a bumper crop of 100 million tonnes will not solve the basic food problem in India, particularly the problems faced by the people in the deficit States and even the vulnerable sections in the surplus States.

Industrial Sector

1.8 Just as the crisis in Indian agriculture became pronounced during the Third Plan period, the crisis in the industrial sector in India also became acute during the Third Plan. The rate of industrial production which was rising till 1963 started declining from 1963-64 onwards as can be seen from the following table: (An industry-wise break-up of the variations in industrial output during 1966 as compared to the earlier year 1965, is given in Appendix 1.1.)

Index Numbers of Industrial Production
(Base 1956-100)

YEAR	General Index (unadjusted) Annual average	Percentage variation over the previous year
(1)	(2)	(3)
1961	141.0	..
1962	152.6	+8.2
1963	165.8	+8.7
1964	177.0	+6.8
1965	186.9	+5.6
1966	191.6	+2.5

Source:—Reserve Bank of India, Report on Currency and Finance, 1966-67.

1.9 During the first four months, January—April, 1967, industrial output again suffered a set-back; the increase in output being only 0.6% over the level in the corresponding period in 1966. In spite of liberalisation of imports and the price advantage given to many industries through devaluation and export assistance and incentives, industrial production has not picked up to any noticeable extent. On the other hand, the reduction in developmental outlays in the public sector, arising from the resources crisis at the level of the Government of India, has contributed to the creation of the curious situation of business recession in the midst of an inflationary situation.

1.10 Probably the most disturbing feature of the Indian economic situation is the continued inflationary pressure in the economy, resulting in declining real income of large sections of the people and consequent reduction in their economic welfare. The price index for food articles went up by 14% in 1965-66 and by 41.5% in 1966-67 over that of 1964-65. The overall increase in price index during the above two years has been 15.2% and 34.2% respectively. In other words, in order to maintain the consumption level of food articles in real terms at about the same level of 1964-65 it was necessary to spend 41.5% more in money terms in 1966-67. (For the Index Numbers of Wholesale Prices and Working Class Consumer Prices Index, see Appendix 1.2).

1.11 The crisis in agriculture and industry and the continued imbalances in foreign trade, coupled with inflationary pressures at home cannot but have serious implications to resources mobilisation. Domestic savings cannot show any significant increase under the economic conditions prevailing in the country today. In their attempt to solve the domestic resources crisis, the Government of India have been placing increasing reliance on foreign aid and on collaboration with private monopoly capital. (For details see Appendix 1.3, 1.4 and 1.5). However, the policy of increasing reliance on foreign aid has already created further and more complicated problems relating to repayment and debt servicing, in addition to the more serious threat it poses to India's economic and political independence and self-reliance.

1.12 The above analysis indicates that the basic cause of the present crisis in the Indian economy is the fundamental weakness in the very structure of the economy; and the attempt to push up investment expenditure according to pulls and pushes from those classes and groups which own the major assets or means of production has only resulted in creating further imbalances in the economy. The attempt to build up a capitalist economy on the slender base of a disorganised and out-moded feudal agrarian economy has meant the perpetuation of inter-sectoral imbalances of a sort unusual in many other developing countries.

1.13 The crisis that prevails in the Indian economy today cannot be considered in isolation from the general crisis in which the World capitalist system finds itself. The increasing gap in the levels of income between the developed and developing countries, the structural dis-equilibrium in the international system of commodity exchange and payments, the instability of primary products, particularly raw-materials in the World market, the continuously adverse terms of the trade of the less developed nations of Asia, Africa and Latin America, the series of devaluations of the currencies of many countries in tune with the depreciation in the value of Pound Sterling and the serious threat to the very stability of the Dollar, are all significant evidences of the deep crisis of the World capitalist system.

1.14 To the extent to which India is linked up with the international system through trade, aid and private foreign investments it is but natural that the over-powering events that take place in the World economy would affect the Indian economy in a significant manner.

1.15 In a similar way, the crisis in the Indian economy adversely affects Kerala. The crisis in planning and the crisis in resources position is directly transmitted to the economy of Kerala. This is particularly true because all the major economic policies, fiscal policy, monetary policy, price policy, etc., and the predominant share of developmental outlay are all initiated and controlled at the all India level and they affect all the States of the Indian Union. The existing centre—State economic and financial arrangements only aggravate the imbalances in the powers and resources position as between the Centre and the States.

KERALA'S ECONOMY, 1967

State Income:

1.16 Kerala continued to be one of the less developed States in India in terms of per-capita income and the level of industrial development. Compared to the all—India income per-capita of Rs. 348 in 1964-65 (at 1960-61 prices) per-capita income in Kerala was only Rs. 290.68, that is lower by Rs. 58.32. The gap between the all-India and Kerala figures for income per-capita actually widened in 1964-65 compared to the previous year. Another important development has been the decline in the share of Agriculture in the State income (at constant prices) from 54.5% in 1950-51 to 49.6% in 1964-65. The share of Industries has also gone down from 16.2% to 14.2% during the same period. In other words, the relative share of the remaining sector, that is, Services or what is called the "tertiary Sector" increased.

Agriculture

1.17 The agricultural sector of the State registered overall progress during 1966-67. The net area sown increased by 26 thousand hectares (1.3%) compared to the previous year. The area sown more than once witnessed a remarkable expansion by 44 thousand hectares, the percentage increase over the year being as high as 9%. The area under cultivation went up significantly in respect of most of the major crops. The only major crops which suffered a fall in area were rice, sugarcane and bananas. The fall in the case of rice was nominal, being only 0.4%.

1.18 There was appreciable increase in production in the case of eight out of the ten principal crops in the State. The production of rice went up by 9%, coconut by 4%, arecanut by 14%, tapioca by 10% and cashewnut by 4%. The plantation crops also showed a general rise in production during the year. The two major crops which witnessed a fall in production were pepper and bananas. The production of pepper declined by about 5% and that of banana by 4%.

1.19 The food situation in 1966-67 was, however, extremely difficult in spite of an increase in rice production in the State. The ration system was subjected to stresses and strains owing to short falls in supplies from the Centre. The average monthly allotment of rice from the Centre to the State dropped from 56,994 tonnes in the first half of 1967 to 33,208 tonnes in the second half. This compelled the State Government to scale down the rice ration from 6 oz. to 3 oz. per adult per day from the last week of May 1967 which led to an unprecedented rise in the open market price. In addition to all these, the Central Government made two major upward revisions in the ex-depot prices of foodgrains. The two revisions together would have resulted in a 39% rise in the price of ration rice, had the increases been passed on to the consumers. In order to avoid this, the State Government have had to bear a heavy financial burden running into several crores rupees.

1.20 The partial decontrol of sugar in November 1967 was another development which aggravated the hardship of the consumers.

1.21 The quantity of rice available for consumption in the State after making allowance for seed was only 9.76 lakh tonnes in 1966-67 as against a requirement of 24.60 lakh tonnes. Thus the deficit at present is of the order of 60%. This points to the fact that the food problem in Kerala will continue to be difficult until the Centre comes to the aid of the State in a large way.

1.22 The forest is a source of substantial revenue to the State. The net revenue from forests has been steadily increasing in the past. This trend continued during 1966-67 also, the increase in net revenue for the year being 14%.

Plantations:

1.23 The performance of the plantation industry was remarkably good during 1966-67, production reaching almost record heights. This favourable turn is attributed mainly to increase in productivity.

1.24 Area and production of natural rubber increased considerably. From 165 thousand hectares in 1965-66, the area rose to 171 thousand hectares in 1966-67. Tappable area increased by half a percent and average yield per hectare of tappable area rose from 448 to 483 Kg. The rise in productivity of rubber was nearly 8% during the year. Production of rubber reached an all time record of 54818 tonnes in the year 1966-67 compared with only 50530 tonnes in the previous year.

1.25 The total consumption of all kinds of rubber in the country has also been increasing steadily in the past. Natural rubber consumption also increased almost proportionately from 63765 tonnes in 1965-66 to 68685 tonnes in 1966-67.

1.26 Based on the recommendations of the Tariff Commission, the Government of India have recently fixed the 'fair price' of natural rubber at Rs. 415 per quintal. The rubber growers were however, forced to sell their produce at Rs. 310 to Rs. 350 per quintal. The reason for this was the heavy accumulation of imported stocks by the tyre manufacturers. The glut in the Indian rubber market coincides with a crash in the world price of natural rubber which fell to such a low level as Rs. 280.50 per quintal.

1.27 Production of tea rose by 2.6% during the year, though area declined by 0.8 per cent. This increase in production was achieved as a result of increase in average yield per hectare which rose to 1128 Kg. per hectare in 1966 compared to 1091 Kg. in the previous year. The average prices of leaf tea and dust tea sold at Cochin auctions were Rs. 4.80 and Rs. 4.51 per Kg. respectively. The prices in 1965 were slightly higher. Since the beginning of 1967, however, Cochin tea market has been very buoyant. The temporary dislocation of supplies from Ceylon and the imbalance in supply and demand amount for this favourable turn.

1.28 There was a steadily rising trend in the past in the production of Coffee in Kerala. From 9.88 thousand tonnes in 1965-66, the output went upto 10.51 thousand tonnes in 1966-67, the increase over the previous year being 6.4 per cent. Area under coffee also increased considerably.

Fishery and Animal Husbandry:

1.29 Production of fish increased from 2.22 lakh tonnes valued at Rs. 5.9 crores in 1965-66 to 2.35 lakh tonnes valued at Rs. 7.8 crores in 1966-67. While total fish production increased by 5.9 per cent during the year, marine fish landings increased by 5.5%.

Considerable progress was made during the year in the construction of mechanised boats. In 1966-67, 216 mechanised boats were constructed—89 in the public sector and the rest in the private sector. Compared to this the total number during the previous year was only 77. Construction of a few new ice—plants and storage plants is also underway.

1.30 One remarkable feature in the development of fisheries in Kerala has been the formation of the Kerala Fisheries Corporation during the year. All the boat-building yards, ice-factories and refrigeration plants in the State sector are brought under the Corporation to facilitate a co-ordinated approach to fish production and export. During the first year of its existence the corporation exported 407 tonnes of frozen marine products valued at Rs. 42.84 crores. The Indo-Norwegian Project has been rendering valuable service to the development of fisheries in Kerala. During 1967, the Project chartered a new fishing ground of approximately 1000 Sq. miles between 150 fathoms and 200 fathoms off the Quilon coast. This has opened up great possibilities.

1.31 The per capita availability of milk in Kerala is placed around 2 oz. per day as against 5 oz. at the all India level. The average annual yield of milk per cow in Kerala is about 420 Kg. only compared with 780 Kg. in Punjab and 710 Kg. in Andhra Pradesh.

1.32 During the year under review, four pig development blocks were newly started. Also preliminary work for the establishment of a cattle feed manufacturing plant at Palghat and a poultry development plant has been taken up. The Indo-Swiss project at Madupetty is planning to start a pilot project in Peermade area for the development of animal husbandry by supplying good cattle to the settlers of the area, so that animal husbandry along with farming may be developed along business lines.

Industry and Mining:

1.33 The number of factories in Kerala rose from 2918 in 1966 to 2983 in 1967 and factory employment increased from 1.95 lakhs to 2.01 lakhs. It may be mentioned that employment in factory units forms only 17.0% of the total employment in the Industries Sector. The factories of Kerala account for only 4.1% of the total factory employment in India as against 20.4% in West Bengal and 20.1% in Maharashtra.

1.34 The average daily wage rates of workers earning less than Rs. 400 per month was Rs. 3.54 in Kerala, as against Rs. 6.13 in India as a whole. This low wage rate in Kerala is indicative of the existence of a large number of units of traditional industries which employ very low levels of technology.

1.35 During 1966-67 only 1 public limited company and 19 private limited companies were newly registered in the State. 14 companies were struck off, while 26 companies went under liquidation. There was a reduction of nearly 18% in the number of public joint stock companies over the period 1961-66 and in 1967, there was a further decline of 2%. The number of private limited companies also declined by 1.5% in 1967. However paid up capital both in the private and public limited concerns registered an increase.

1.36 The traditional industries like Coir, Cashew and Handlooms occupy a very important place in the industrial set up of the State. Coir industry employs nearly 4 to 5 lakhs of workers. About 92% of the production of yarn is done in the co-operative sector. There are at present 543 coir service co-operatives in which Government have made an investment of Rs. 272 lakhs as share capital. Of late, this industry is facing difficulties in the marketing of its products abroad in view of competing products. A large number of factories have been closed down rendering the under-paid workers unemployed. The cashew industry is also moving towards a crisis in view of the fact that the East African countries from where this industry imports nearly 2/3rd of its requirements of raw nuts are now progressing fast with mechanised methods of processing cashew. The handloom industry is also in the grip of a general slump. In view of the very large number of workers employed in these traditional industries, immediate measures are called for to prevent any further deterioration in the situation.

1.37 In the field of minerals recent geological investigations have shown that fine varieties of clay and magnetite ore exist in different parts of the State. A detailed survey is proposed in 1968. The occurrence of bauxite ore is also reported. This improved position in respect of mineral deposits, perhaps will go a long way in opening up new possibilities in the field.

Power:

1.38 The State's position in regard to the generation of power improved considerably during 1967-68. Till recently, power-cuts have been a regular feature every year hindering the full utilisation of even the present industrial capacity. Electricity purchased from the neighbouring States also decreased from 116 million units in 1965 to 78 million units in 1966-67.

1.39 The total installed capacity of the power system in the State as on 1-2-1968 was only 528.5 MW. Three units of the Sabarigiri Project with an installed capacity of 150 MW have been commissioned during 1967-68. The second generator unit of Sholayar with a capacity of 18 MW has been commissioned in January 1968. Civil works relating to Kuttiadi project are progressing fast.

1.40 Altogether 1083.11 million KWh of electricity was generated in 1966-67 as against 841.94 KWh in 1965-66. Under transmission

schemes, the lines from Kozhikode to Cannanore, Poringalkuthu to Alwaye, Kundara to Quilon etc., are expected to be completed before the close of the financial year. Distribution and rural electrification works have also been stepped up in view of the need for increasing agricultural production through energisation of pumps.

Transport:

1.41 In the field of road transport, not much data are available regarding the private sector. In the public sector, the Kerala State Road Transport Corporation undertook considerable activities. During 1966-67, the programme of nationalisation of the two important routes viz., Ernakulam-Kottayam (via Vaikom-Erattupettah) and Kayamkulam-Punalur was implemented. There was a net addition of 100 vehicles to the operating fleet of the Corporation consisting of 85 buses, 4 lorries and 11 vehicles of other types. The number of schedules and the effective kilometers of operation also increased considerably. The gross revenue receipt of the Corporation in 1966-67 was Rs. 751.66 lakhs and the gross expenditure Rs. 724.54 lakhs, yielding a surplus of 24.12 lakhs. The Corporation introduced Express services to the neighbouring States of Madras and Mysore also. While the southern parts benefit considerably from the activities of the Corporation, the northern parts even now feel the absence of an efficient passenger transport system. In the field of inland water transport also, the corporation made significant contributions.

1.42 The ports in Kerala are lacking even the minimum amenities required. The State Government have entered into an agreement with Indopol Company for the preparation of a feasibility report about the development of minor ports in the State. The work of the company is in progress. As regards fishing harbours considerable progress was made during the year in the development of the harbours at Vizhinjom and Mopla Bay. Some work was also done at Baliapatam, Baypore, Azhikode and Ponnani. This may go a long way in meeting the urgent demands of the Fishery industry.

Export-Import Trade:

1.43 Significant increase in the quantity of exports was observed only in the case of cashew kernels, marine products and coffee. In most of the other cases, there was actually a decline in the quantity exported. But the value of exports in 1966-67 was Rs. 137 crores as against Rs. 90 crores during the previous year, the increase being nearly 52 percent.

1.44 Cashew kernels continued to contribute the largest share to the State's foreign exchange earning. During the year 1966-67 cashew kernels fetched Rs. 43.52 crores as against Rs. 26.02 crores in the previous year. During the same period the quantity exported registered only a marginal increase of 838 tonnes over the previous

year. Exports of marine products increased to 13099 tonnes valued at Rs. 15.19 crores compared with the previous year's 10357 tonnes worth Rs. 7.36 crores. Nearly 13400 tonnes of coffee were exported compared with only 9679 tonnes in the previous year.

1.45 The quantity exported declined in the case of the other commodities. Exports of Pepper declined from 24477 tonnes to 20020 tonnes, that of tea from 45254 tonnes to 38420 tonnes, that of cashew shell liquid from 12250 tonnes to 9446 tonnes and that of Coir marginally from 63488 tonnes to 62012 tonnes. But the value of exports showed increases in all the cases, due to the fall in the value of the Rupee.

1.46 Devaluation of the Pound Sterling, followed by a chain of devaluations by other countries including India's competitor Ceylon, created added problems for Kerala's export sector. Though the long-term effect of these events cannot be determined, it has been reported that in the case of the traditional products such as Cashew and Coir, Kerala's exports have been adversely affected as a result of short term dislocation in trade. The future prospects for some of our important foreign exchange earners are rather bleak. Cashew industry is heavily dependent on African import of raw nuts and the emergence of mechanised processing units in African countries is increasingly becoming a threat to our Cashew industry. Immediate large scale efforts to achieve substantial increase in internal production of raw cashew nuts are called for if the industry is to be saved. The comparatively poor finish of our coir products is a positive handicap to the Coir industry in the field of exports. Corrective measures are called for in this case also.

Education:

1.47 Kerala leads the States in the Indian Union in the matter of literacy (46.8%). Per-capita expenditure on education is the highest in Kerala compared to the other States. The number of schools is increasing every year owing to the increasing demand for more and more schools. The shift system has been introduced in a large number of lower primary schools especially in the Travancore-Cochin area of the State. The introduction of shift system has naturally affected the quality of education as well. The private sector has a major role to play in the State's educational sector. Of the 10691 schools in the State in 1967-68, 6656 are under private management.

1.48 The problems of wastages in general education deserve attention. It has been estimated that the extent of wastage in the lower primary stage in 1965-66 was of the order of 21% and in the upper primary stage 25%. The wastage in the secondary stage is still higher at 37%.

1.49 There were 106 arts and science Colleges during 1966-67. The enrolment in these institutions rose from 1.05 lakhs in 1965-66 to

1.13 lakhs in 1966-67. There were six Engineering Colleges with an intake capacity of 1160, four Medical Colleges with an intake capacity of 545 and one Dental College with an intake capacity of 30. There were also 19 teachers' Training Colleges where 993 boys and 1081 girls were enrolled.

Health:

1.50 The per-capita Government expenditure on health services is highest in Kerala compared to other States. In 1966-67 it was Rs. 5.28. There were 503 institutions coming under the modern system of medicine with a bed strength of 19950. The number of medical and public health institutions in 1957-58 was 369 and the number of beds 11959. The number of beds available per lakh of population during 1966-67 was 102 and the norm suggested by the Mudaliar Committee (one bed per 1000 population) has been surpassed. There were also 40 Ayurvedic hospitals and 218 Dispensaries in 1966-67. The family planning programme was introduced in 1955. By 1966-67 there were 1446 family planning centres in the State.

Other Social Services:

1.51 The major activities of the Government for the welfare of backward classes are educational concessions, housing, water supply and health services. During the year 1966-67 stipends were given to 301139 students in pre-matric classes, 1329 in vocational classes, 30442 in post-matric classes and 4365 in technical and professional colleges. 29 Welfare Hostels, 6 Cosmopolitan hostels and 18 subsidised hostel were run during the year.

Employment Situation:

1.52 Current information on the total quantum of unemployment in the State is not available. The available data do not indicate any improvement in the situation. In fact, some of the recent studies have shown that unemployment has slowly affected engineers also. Added to this, is the problem of chronic underemployment among the rural working force.

1.53 A sample survey on employment and unemployment conducted in Kerala in 1965 revealed that there were 5.5 lakhs of unemployed persons in the State of whom nearly 1.4 lakhs were educated. It was also found that out of the 54.7 lakhs of employed persons nearly 30 percent worked less than 28 hours during the week. This gives an idea about the magnitude of the problem of underemployment. During the two years which elapsed since the conduct of the above survey, there does not seem to have been any improvement in the situation.

1.54 The average number of registrations with the employment exchange increased to 1.55 lakhs in 1967 compared to

1.37 lakhs in 1966. The number of placings declined from 1690 in 1966 to 15617 in 1967. The index of employment (base: 31-3-196—100) rose to 100.8 as on 30-9-1966, but declined since then until it reached 100.0 again on 30-9-1967. The indices for the public sector have steadily increased, but those for the private sector generally remained below 100. This clearly shows that not much headway was made during the year in respect of generation of employment.

1.55 Preliminary studies on Medical and Engineering personnel indicate that at the present rate of out-turn of educational institutions unemployment, especially among engineers is likely to assume very serious proportions. Even in the case of doctors, the desirable norms recommended by the Mudaliar Committee will be reached long before 1981.

Prices:

1.56 The year 1967 witnessed a further deterioration of the price situation in the State. Prices of almost all food articles and other basic consumer goods have moved up resulting in a further increase in the cost of living index by 56 points for the State. During the year the wholesale price index of agricultural commodities for the State registered an increase of 23 points.

1.57 The experience of the past decade of planning in India has been one of rising prices. The general index of wholesale prices (All India—base '52-53—100) moved up from 107.2 in April 1957 to 214.9 in November 1967 which means a rise in the price level at an average annual rate of 10%. It is also noted that the five year period of the Third Plan witnessed on the whole, an increase of 32% in the wholesale price index for all commodities. A large portion of this price rise was caused by the increase in prices of food articles (41%).

1.58 A short fall in agricultural production together with a significant fall in the Central allotment of foodgrains to the State led to a weakening of the distributing system. While developments on the supply side were not favourable, there were also problems arising from rising consumption, extent of deficit financing as well as unplanned credit creation. The average working class consumer price index number of the State which stood at 693 during 1966 moved up to 729 during 1967. The increase was accounted for mainly by the commodities included in the food group.

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Services still continue to play an increasing role in the economy. The share of the services sector in Kerala went up from 29.3% in 1950-51 to 36.2% in 1964-65.

2.9 The sector-wise average annual growth rates of income during the period 1951-52 to 1964-65 at constant prices are shown below. The figures are in percentages.

Sector-wise average annual growth rates (Percentages)

Sector	Kerala		India	
	Current prices	Constant Prices	Current prices	Constant prices
1. Agriculture	9.7	2.7	9.9	2.9
2. Mining and Industries	5.4	2.4	7.9	3.9
3. Services	8.3	4.9	6.5	5.1
4. Net domestic product	8.6	3.4	8.4	3.9

It is clear from the above that growth of real income in Kerala was much less than that in India. Particularly important is the fact that, while income from the Industrial sector in India rose at an annual rate of 3.9 percent, in Kerala the rate was only 2.4 percent. In the other sectors also Kerala lagged behind the rest of the country.

2.10 Differences in the level of per capita income between Kerala and all-India have increased in spite of all these years of planning. A comparison of the per capita income of Kerala with that of India is given below.

Differentials in Per-capita income

Year	At constant (1960-61) prices			At current prices		
	India	Kerala	Income difference	India	Kerala	Income-difference
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1950-51	275.00	248.95	26.05	..	..	..
1955-56	299.00	263.63	35.37	266.50	214.75	51.75
1960-61	326.00	275.96	50.04	326.00	275.96	50.04
1964-65	348.00	290.68	58.32	427.30	369.58	57.72

During 1950-51 per-capita income in Kerala at 1960-61 price was Rs. 248.95 as against Rs. 275.00 for all-India. The difference in per-capita income works out to Rs. 26.05. This gap steadily widened each Plan period and reached a record figure of Rs. 58.32 in 1964-65. But during the same year the gap at current prices declined

to Rs. 57.72. This is solely due to the higher rate of price rise in Kerala which itself is another malady facing the State.

2.11 While the average annual rate of growth of per capita income for all-India maintained a slow but steady increase over each Plan period, Kerala's position is different. During the First Plan period per capita income increased at an annual rate of 1.2%. The Second Plan period witnessed a fall to 0.9% as against 1.8% for all India. During the Third Plan period the rate of growth of per capita income rose to 1.3% still maintaining a wider gap in the rate of growth between Kerala and India than that existed during the First Plan period. This situation calls for a larger investment effort and vigorous attempts at tampering the population explosion during the coming Plans to achieve a faster growth of income than has been possible hitherto.

CHAPTER III

AGRICULTURE AND FORESTRY

The agricultural economy of the State witnessed appreciable progress during 1966-67 compared to the previous year. The net area sown as well as the gross cultivated area increased. There was substantial increase in the production of all the major crops. The production of rice recorded a rise of about 9% and that of tapioca 10%. This could not make any mark on the worsening food situation of the State since the increase in the production of rice is insignificant compared to the magnitude of the deficit. The production in the allied fields like forests also was higher in 1966-67 than in 1965-66. The net revenue from forests increased by 17%.

Rainfall:

3.2 There was a steady decline in the annual rainfall in the State from 3734 mm. in 1960-61 to 2465 mm. in 1963-64. It recovered to the 1962-63 level in 1964-65 but dropped again to reach an all-time low of 2209 mm. in the next year. The position was considerably better in 1966-67, with a total precipitation of 2682 mm. The annual rainfall statistics for the years from 1960-61 to 1966-67 are given below:

<i>Year</i>		<i>Annual rainfall (mm)</i>
1960-61	..	3734
1961-62	..	3310
1962-63	..	3125
1963-64	..	2465
1964-65	..	3146
1965-66	..	2209
1966-67	..	2682

3.3 It is the seasonal distribution of rainfall rather than the total rainfall that determines the success or failure of crops in Kerala. A late south west monsoon may cause damage to the first crop (virippu) of paddy through drought at the early period of growth and flood at the manuring stage. A late north-east monsoon will affect the second crop more or less in the same manner. A late south-west monsoon and an abnormally low precipitation from the north-east monsoon characterised the year 1965-66. This had its deleterious effect, especially on the first paddy crop of 1966-67. The distribution of rainfall was more favourable in 1966-67 and it was

reflected in the second and third crops of the year. The monthwise distribution of rainfall for the years 1965-66 and 1966-67 is given below:

<i>Months</i>	<i>Rainfall (mm.)</i>	
	1965-66	1966-67
(1)	(2)	(3)
July	423	538
August	305	185
September	150	309
October	191	408
November	145	250
December	172	53
January	3	17
February	7	..
March	69	26
April	163	70
May	86	274
June	495	552
Total	2209	2682

Land Utilisation:

3.4 The classification of the geographical area of the State according to land use for 1966-67 is presented below; the figures for the previous year are also provided for the sake of comparison.

<i>Class of Land</i>	<i>Area in thousand hectares</i>	
	1966-67	1965-66
(1)	(2)	(3)
Total Geographical area	3859	3859
1. Forests	1056	1055
2. Land put to non-agricultural uses	235	228
3. Barren and uncultivable land	100	110
4. Permanent pastures and other grazing land	28	28
5. Land under miscellaneous tree crops not included in net area sown	182	220
6. Cultivable waste	106	108
7. Fallow land other than current fallow	34	32
8. Current fallow	27	33
9. Net area sown	2091	2065
Area sown more than once	531	487
Total Corpped area	2622	2552

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3.5 As is evident from the figures given above, the area of land under crops has increased by 26 thousand hectares during the year under review. A very encouraging feature of the trend in land use during the year is the marked increase in the area sown more than once to the extent of 44 thousand hectares. These together have led to an increase of 70 thousand hectares in the total cropped area. The increases in percentage terms are 1.3%, 9.0% and 2.7% in the case of net area sown, area sown more than once and gross cultivated area respectively. The increase of 26 thousand hectares in the net area sown has been made possible by the reduction in the area under miscellaneous tree crops, current fallow and cultivable waste.

Area under crops:

3.6 The area under all the major crops except rice, banana and sugarcane increased during 1966-67 compared to the previous year. The area under tapioca increased by about 15 thousand hectares, cashewnut by 3 thousand hectares, arecanut by 7 thousand hectares and coconut by 2 thousand hectares. The plantation crops viz., rubber, tea, coffee and cardamom also recorded sizeable increases in the area under cultivation. There was a slight fall of about 3 thousand hectares (less than 1%) in the acreage under rice. The area under-banana and other plantains and sugarcane fell by about 5% and 4% respectively.

3.7 The changes in the area under cultivation of the major crops during 1966-67 are worked out below:—

Crop	Area (thousand hectares)			Increase (+) or decrease (—) in 1966-67 over 1965-66
	1965-66	1966-67		
(1)	(2)	(3)	(4)	
Rice	802.3	799.4	(—) 2.9	(0.4)
Sugarcane	9.2	8.8	(—)0.4	(4.3)
Banana and other plantations	47.8	45.6	(—)2.2	(4.6)
Tapioca	229.7	244.6	(+)14.9	(6.5)
Coconut	586.3	609.6	(+)23.3	(4.0)
Arecanut	64.5	71.2	(+)6.7	(10.4)
Cashewnut	87.4	90.6	(+)3.2	(3.7)
Tea	39.5	39.8	(+)0.3	(0.8)
Coffee	23.6	25.2	(+)1.6	(6.8)
Rubber	149.6	153.4	(+)3.8	(2.5)

Note.—The figures in brackets show percentages

3.8 The trend in the area under crops shown above does not reflect a planned approach to allocation of land to different crops.

The acreage has fallen in respect of crops for which an increase in area was most needed. The fall in the area under rice, apart from being unwelcome, would appear paradoxical in the context of severe food shortage and consequent rise in the price of rice. The fall in the cropped area which is just nominal in this case must be the result of total damage to the crop in certain areas due to drought or disease. Bananas and other plantains are an important item of subsidiary food already in short supply. The fall in the area under sugarcane is even more disquieting, for the sugar factories in the State are threatened with partial or complete closure owing to lack of raw material.

3.9 The increase in the area under crops like coconut, cashewnut and the plantation crops is quite welcome. At present there is good demand for arecanut and it continues to be the most lucrative crop of the State. This has prompted rapid expansion of the area under arecanut in recent years, but it is doubtful whether this will be in the interests of the State's economy in the long run. The habit of chewing pan is presumably on the decline and there is every reason to believe that, by the time the newly planted areas start to yield, the demand will fail to keep pace with the supply. In the case of tapioca an increase in production will help relieve the serious food situation, but this could easily be achieved by intensive cultivation rather than extensive cultivation.

3.10 Looking at the trend in the cropping pattern of the State, one cannot help noticing the stagnation that has beset some of the crops which for centuries occupied a unique position in the agricultural economy of the State. The most conspicuous among these is pepper, though there are others like ginger, turmeric, cardamom and lemongrass which have had almost the same fate. The reason for this predicament is not far to seek. The monopoly that Kerala enjoyed in these products is no longer there. The South East Asian countries and, lately, the virgin lands of Africa and South America have started producing them at a much lower cost than Kerala. Faced with tough competition from these countries, Kerala has to struggle hard even to keep head above water in the international market.

3.11 According to the classification of crops into food and non-food crops adopted at the all India level, Kerala has 64% of the total cultivated area under food crops. But most of these crops are not really food crops of the State, in the sense that they are not meant for consumption as food within the State. It is more appropriate to classify the crops of Kerala into food crops and cash crops based on whether they are meant mainly for direct consumption or sale. Crops like cashewnut, sugarcane and the spices are ultimately consumed as food but are produced in Kerala with an eye to the market.

3.12 If the above classification is adopted the only crops which could be classified as food crops in Kerala are rice, pulses, tapioca,

and fruits and vegetables. All the other crops will have to be grouped under cash crops. According to this classification only about 50% of the area is devoted to food crops; the remaining 50% of the area is under cash crops. This is a unique feature of the agricultural economy of the State. Even if the above method of classification is extended to the other Indian States, the proportion of cultivated area devoted to food crops in those States will range from 65 to 70%.

Agricultural Production:

3.13 The most important crops of the State from the point of view of their share in the gross agricultural output are rice, coconut, tapioca, arecanut, pepper, tea, bananas and other plantains, cashewnut, rubber and coffee, roughly in that order. These ten crops together account for more than 80% of the total cropped area as well as the gross agricultural output of the State. The trend in the production of these crops will therefore be a fairly reliable index of the progress in agriculture.

3.14 During 1966-67 there was appreciable increase in production in the case of eight out of the ten crops mentioned above. In spite of the fact that the area under rice suffered a slight fall during the year, the production of rice showed an increase of about 87 thousand tonnes or nearly 9%. This increase against a fall in area is creditable but, while comparing the production with that of 1965-66, it is to be remembered that the production in 1965-66 was abnormally low. The production of rice in 1966-67 was only 10.84 lakh tonnes compared to the average of 11.14 lakh tonnes for the three years ending 1964-65. It may also be mentioned that the production in each of these three years was higher than that in 1966-67.

3.15 Coconut which is next in importance to rice registered a substantial increase in production viz., 132 million nuts or 4% during the year under review. With an output of 3425 million nuts, the production of coconut touched a new high during 1966-67. Among the other crops, arecanut, cashewnut, tapioca, rubber and coffee have been maintaining a steady increasing trend over the past several years. This trend continued during 1966-67 also. In the case of tea the trend in production has not been steady but, on the whole, the production level can be said to have been rising. The production of tea registered a remarkable increase of 12.7% during 1966-67 compared to 1965-66. The output in 1966-67 was also the highest ever reached.

3.16 As is evident from the foregoing analysis of production trends, eight out of the ten principal crops of the State present a bright picture of progress. However, the other two crops viz., pepper and bananas present a rather gloomy spectacle. Pepper is a crop whose fortunes are closely linked up with foreign markets. The severe competition Indian pepper has had to face from other sellers

in the international market has dampened its prospects. Pepper prices have been subjected to constant fluctuations and this has served as a serious disincentive to the producers. Consequently, pepper is exhibiting a steady falling trend both in production and productivity over the last several years while the area under the crop remains more or less static. The only salvation for this crop lies in revolutionising the cultivation practices with a view to achieving a substantial rise in productivity. This will bring down the cost of production and thus improve the competing power of Indian pepper in the international market.

3.17 The production of bananas and other plantains declined from 361 thousand tonnes in 1965-66 to 345 thousand tonnes in 1966-67. Unlike pepper, bananas and other plantains do not exhibit a steady falling trend either in production or in productivity over the years. Production is subject to fluctuations but the general level is showing moderate rise over a period of years. The lack of a steady trend in production is perhaps due to the fact that the cultivation of this crop is for the most part unorganised and unplanned. Only the large variety of bananas called 'Nendran' is cultivated in the true sense of the term. The other varieties mostly are just allowed to grow in house premises rather than cultivated. The untold damage done to the crop by the bunchy top disease is also responsible to a large extent for the poor progress in its production.

3.18 The trend in the production of the ten crops discussed above is presented in the following table:

Crop	Production (thousand tonnes)						
	1960-61	61-62	62-63	63-64	64-65	65-66	66-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Rice	1068	1004	1093	1128	1121	997	1084
2. Coconut (million nuts)	3220	3247	3305	3262	3278	3293	3425
3. Tapioca *	..	..	..	2524	2763	3096	3410
4. Arecanut (million nuts)	7737	8091	8312	8522	8945	9681	10683
5. Pepper	27	27	24	22	22	22	21
6. Tea	40	38	39	41	42	39	44
7. Bananas and other plantains	328	317	327	326	341	361	345
8. Cashewnut	85	86	92	92	96	98	102
9. Rubber	23	25	29	34	40	47	50
10. Coffee	7	8	8	9	10	10	11

* The production figures for the years upto 1962-63 were conventional estimates while those for later years have been worked out on the basis of crop cutting experiments. These two are, therefore, not comparable.

More important among the crops other than those discussed above are ginger, cardamom, turmeric, sesamum and groundnut. The production of ginger and turmeric declined slightly in 1966-67 compared to the previous year and that of cardamom remained at previous year's level. The production of sesamum increased slightly while that of groundnut registered a substantial fall.

Food situation:

3.19 The food situation in the State during 1967 was quite critical in spite of an increase in the internal production of rice in 1966-67. The rationing system itself was subjected to jerks and jolts and even threatened to break down. The State Government was compelled to scale down the rice ration from the prescribed rate of 6 oz. per adult per day to 3 oz. per adult per day. Even this reduced ration could not be maintained smoothly and suffered occasional interruptions. As a consequence of these, the open market price of rice shot up to unprecedented heights.

3.20 This was all due to the failure of the Centre to make adequate and timely supplies of rice to the State. The rice supplies from the Centre averaged only 45101 tonnes per month during 1967 as against the monthly requirement of 75000 tonnes for maintaining the rice ration at 6 oz. per adult per day. The Central allotment of rice to Kerala fell drastically in the latter half of 1967. The average monthly allotment dropped from 56994 tonnes in the first half of the year to 33208 tonnes in the second half. The statistics of imports of rice into Kerala for the years 1965 to 1967 are furnished below for comparison.

Import of Rice		
1965	..	8.88 lakh tonnes
1966	..	7.52 "
1967	..	5.41
	January	66195 tonnes
	February	48563
	March	70853
	April	43859
	May	47443
	June	65049
	July	28486
	August	40555
	September	37158
	October	22763
	November	30429
	December	39854
	Total	541207

3.21 The State Government geared up the machinery for internal procurement of paddy and made an earnest effort for achieving the targets for procurement. The procurement price including bonus was also raised from Rs. 52 per quintal to Rs. 65 per quintal from the Virippu Crop of 1966. This yield divided. There was a substantial improvement in the quantum of procurement as is evident from the data given below:

Procurement of Paddy — Targets and Achievements

<i>Year & Crop</i>	<i>Target (tonnes)</i>	<i>Achievement (tonnes)</i>	<i>Achievement as percentage of target</i>
(1)	(2)	(3)	(4)
1964-65 II & III Crops	77400	44643	57.6
1965-66 I Crop	46088	39896	86.5
II & III Crops	113000	43611	38.5
1966-67 I Crop	43717	36755	84.1
II & III Crops	79979	56353	70.5
1967-68 I Crop	54719	58373*	106.7

* Includes voluntary sales of 1224.2 tonnes to Government.

3.22 Another unfortunate development in the food front was the two substantial increases, one from December 1966 and the other from January 1968, in the ex-depot prices of rationed food grains at the instance of the Central Government. As a result of these two revisions the ex-depot prices of both rice and wheat increased by 39%. The State Government, in their reluctance to cause hardship to the masses, desisted from passing on the price increases of coarse rice to the consumers. In order to meet the cost of the first price increase alone the State Government had to bear a heavy financial burden of about Rs. 6 crores per annum. The second price increase effected from January, 1—1968 has been more drastic than the first one. If the State Government is to continue to bear the cost of both these increases the resultant financial commitments will be too heavy for the State exchequer to bear.

3.23 The partial decontrol of sugar by Government of India in November 1967 and the consequent sky-rocketing of sugar prices caused severe hardship to the consumers.

3.24 The production of rice in the State in 1966-67 was only 10.84 lakh tonnes as against a requirement of 24.60 lakh tonnes for consumption at the rate of 400 gm. (14 oz. approximately) per adult per day for the population in 1967. At least 10% of the production will go as seed, wastage, etc. If this is deducted from the total output the quantity of rice available for consumption out of the production in 1966-67 would be only 9.76 lakh tonnes and the

deficit would be 14.84 lakh tonnes. Against this deficit the quantity of rice imported into the State from all sources during 1967 was only 5.41 lakh tonnes. The actual quantities of rice and wheat distributed through the ration shops in 1967 were 6.13 lakh tonnes and 4.55 lakh tonnes respectively. The data on monthly off-take of rice and wheat are provided in Appendix.

3.25 The food deficit of the State is as wide as 60% now. The State Government is fully alive to the need for bringing down this deficit to a manageable margin. The Government is exploring all possibilities for stepping up food production, particularly the production of rice. Several schemes for augmenting food production are engaging the serious attention of the Government. It is proposed to construct permanent bunds for the Kayal lands of Kuttanad with financial aid from the Agricultural Re-finance Corporation. With the completion of the bund a second crop can be raised on these lands. A few schemes for reclaiming suitable kayal areas are already under way. It is also proposed to reclaim forest swamps and use them for paddy cultivation. An ambitious programme for reclaiming extensive wastelands in the Cannanore District has been launched. High priority is being given to irrigation and allied schemes.

Forests:

3.26 Forests occupy 10.56 lakh hectares (27.4%) of the total area in the State. Of this, Kottayam covers 24.0%, Quilon 20.4%, Kozhikode 18.3% and Trichur 12.5%. The areas lying under forest are classified into two according to the main species of composition, (i) Coniferous (soft wood) and (ii) non-coniferous (broad leaved). In Kerala, the entire area falls under non-coniferous category as against 94% under it at the all India level. The forest areas are also classified by their type of functions into merchantable and non-merchantable. Those which are within the economic exploitation are called merchantable area and those outside are called non-merchantable area. The merchantable area in Kerala forms 78.7% compared to 77.6% in India.

3.27 The reserve forests in the State cover as much as 80%. The rest is under protected and unclassified status, the unclassified alone forming 19%. The ownership of the forests is divided between Forest Department and private individuals. The former owns 81% of the total forest area in the State. Private forests come to 19% in Kerala as against only 2% at the all India level. Forests are national wealth and evidently the large slice of private forests in Kerala needs immediate take over by the State.

3.28 The total out turn of timber and firewood and other forest produce during the year under review showed significant progress over the previous year. The round logs comprising of teak and

other logs maintained a steady increasing trend in production in the past. From 4.38 lakh cubic metres in 1965-66 the volume of round logs turned out went up to 5.04 lakh cubic metres, the percentage increase over the year being 15. The teak logs constituted 7.2% of the total round logs. The out turn of round poles which was the lowest in 1963-64 since the last six or seven years has been picking up fast. The production of firewood in 1966-67 was an all time record. It exceeded the 1965-66 level by 57.5%. The details are given in the Appendix.

3.29 The gross receipts from forest produce in 1966-67 amounted to Rs. 669.5 lakhs, giving an increase of Rs. 95.6 lakhs (16.7%) over the previous year. The receipts from the sale of timber accounted for Rs. 601.1 lakhs (89.8%) of the total. The net returns from forests during the year under review totalled to Rs. 665.6 lakhs, registering an increase of Rs. 95.2 lakhs (14.3%) over 1965-66. The data relating to revenue from forests are provided in the Appendix.

3.30 The planned projects under forests are aimed at increasing the extent of plantations of various forest species to cater to the growing demand of forest based industries, railways and for fuel, to consolidate and improve the existing natural forests and creation of plantations. During 1966-67, 2545 hectares have been planted with teak against a target of 2995 hectares. The extent of soft-wood planted was 1165 hectares.

3.31 Detailed tables regarding the various aspects of agriculture and forestry are given in Appendix 3.1 to 3.6.

CHAPTER IV

PLANTATIONS

The plantation industry in Kerala registered an all time record in production during 1966-67. The increase in productivity has been mainly responsible for this favourable turn. The production of natural rubber in the State went up by 7.5%, tea by 12.7% and Coffee by 6.3%. Kerala accounted for 92% of the natural rubber, 12% of the tea and 17% of the Coffee produced in the country.

Rubber:-

4.2 The natural rubber industry in India, which is mainly a plantation industry of Kerala, registered significant progress both in area and production during the year 1966-67. From 165 thousand hectares in 1965-66, the area under rubber increased to 171 thousand hectares in 1966-67, the percentage increase in area being 3.6 over the year. Out of this, 94.40 thousand hectares (55%) were planted with high yielding planting materials as against 82.61 thousand hectares (50%) in the previous year. The number of units consisting of holdings and estates totalled 82,335 in 1966-67 compared to 76,140 in 1965-66. The small holdings increased by 6184 units with an area of 6139 hectares and the estates by 11 units covering an area of 408 hectares. The state-wise distribution of rubber holdings and estates is given in Appendix 4.1.

4.3 The total tappable area under rubber was 113.50 thousand hectares in 1966-67. This was 620 hectares (0.5%) higher than that in 1965-66, which stood at 112.88 thousand hectares. The average yield per hectare of tappable area increased from 448 Kg. in 1965-66 to 483 Kg. in 1966-67. The rise in productivity of rubber per hectare was nearly 8% during the year. Use of high yielding varieties, improved cultural practices and utilisation of the development schemes of the Rubber Board were mainly responsible for the increase in productivity (see Appendix 4.2).

4.4 The production of natural rubber reached an all time record of 54818 tonnes in the year under review as against 50530 tonnes in the previous year. The percentage increase in total production over the year was 8.5 as against 10.8 for the previous year.

4.5 The total consumption of all kinds of rubber in the country has also been increasing steadily in the past. From 95,092 tonnes in 1965-66, the consumption of all kinds of rubber increased to 103190 tonnes in 1966-67, of which the consumption of natural rubber was 68685 tonnes as against 63765 tonnes in the previous

year Whereas the consumption of all kinds of rubber went up by 8.5%, the consumption of natural rubber increased by 7.7%. The share of domestic natural rubber production in the total internal consumption remained unchanged at the previous year's level of 53%. The details are furnished in Appendix 4.3.

4.6 There has been rapid expansion in the field of co-operative marketing of rubber. In 1962-63 there was only one co-operative society with a membership of 497. In 1966-67 there were 18 societies with a membership of 9108. The quantity of rubber marketed by the societies in 1966-67 was 3027 tonnes.

4.7 The natural rubber produced in the country forms 2% of the total world output of 2436 lakh tonnes in 1966. Malaysia accounted for 41%, Indonesia 29%, Thailand 9% and Ceylon 5%. The world consumption of synthetic rubber exceeds the natural rubber by 25%. However, the synthetic rubber does not constitute a threat to the natural rubber industry.

4.8 Based on the recommendations of the Tariff Commission, Government of India have recently fixed the "fair price" of natural rubber at Rs. 415 per quintal. However, the rubber growers were forced to part with their rubber for prices as low as Rs. 310 to Rs. 350. The reason for the drastic price fall was the heavy accumulation of stocks by tyre manufacturers, the principal consumers of raw rubber in India. They had built up adequate stocks when there was liberal import and were hesitant to go in for large scale purchases unless there was a marked price advantage.

4.9 The glut in the Indian rubber market coincides with a crash in the world price of natural rubber which falls as low as Rs. 280.50 per quintal the lowest in the last 19 years. This has been caused by the liberal releases of synthetic rubber from the U.S. stock pile. Until this is controlled the chances of a price recovery appear remote.

4.10 An association of the major producers of natural rubber including Malaysia, Ceylon, and Indonesia has been formed to consider joint action among themselves to maintain the price of natural rubber at equitable and remunerative levels.

Tea:

4.11 The Tea industry in India which accounts for 32% of the world production of tea, had a record crop in 1967. The preliminary estimates for the year have placed the out put around 379.4 thousand tonnes. This is 4.6 thousand tonnes higher than the 1966 production and 13.0 thousand tonnes higher than the 1965 production of tea in India. It was North India which yielded a bumper crop of 288.4 thousand tonnes in 1967. South India suffered a fall in production to the extent of 4.5 thousand tonnes compared to 1966. For this region, 1966 was an exceptionally good year in the matter of tea production.

4.12 In 1966 Kerala accounted for 39615 hectares (11.5%) of the total area and 44687 tonnes (11.9%) of the total production of tea in the country. Whereas at the all India level both area and production rose by 1% and 2% respectively, in Kerala, the area declined by 0.8%, while the production rose by 2.6%—apparently the outcome of increased yield per hectare. The average yield of tea per hectare increased from 1091 Kg. in 1965 to 1128 Kg. in 1966. The productivity at the all India level, however, remained below this, i.e., 1086 Kg. per hectare in 1966 as against 1072 Kg. in 1965. In respect of average yield, Kerala maintained its third rank among the tea producing States of India. Details of area under cultivation, total production and average yield of tea are given in Appendix 4.4.

4.13 The structure of the tea estates in Kerala (by size) is given in Appendix 4.5. The total number of estates increased from 2355 in 1964-65 to 2536 in 1965-66, the percentage increase being 7.7. Nearly 99% of this was accounted for by estates below 5 hectares in size. One large estate of 556 hectares was cleared off tea cultivation during the year. Amongst the various groups of estates, productivity was the highest in size group 200—400 hectares as in the previous year. There is a direct relationship between the average yield per hectare and the size of the estate upto the 400 hectare level; and after that marginal productivity begins to decline. This leads to the conclusion that the most economic tea holdings are those between 200 and 400 hectares.

4.14 The average prices of leaf and dust teas sold at Cochin auctions were Rs. 4.80 and Rs. 4.51 respectively during 1966. The prices in 1965 stood at slightly higher levels, viz., at Rs. 4.85 and Rs. 4.53 per Kg. for leaf and dust teas respectively. Cochin tea market, however since the beginning of 1967 has been buoyant. The temporary dislocation of supplies from Ceylon and the imbalance in supply and demand amount for this favourable turn.

Coffee:

4.15 Coffee planting industry in India accounted for 1.6% of the World coffee output in 1966. The production in 1966 was 63.4 thousand tonnes registering a lead of nearly 3% over the previous year. However it was 9% below the 1964 production.

4.16 The trend in production has been a steady rise in Kerala in the past. From 9.88 thousand tonnes in 1965-66, the output went up to 10.51 thousand tonnes in 1966-67, the increase over the previous year being 6.4%.

4.17 The total area under Coffee in 1966-67 was 25152 hectares as against 23602 hectares in 1965-66. The major Coffee producing districts of Kerala are Kozhikode, Palghat, Cannanore and Kottayam. Of the total area under coffee, Kozhikode alone accounts for 65%.

CHAPTER V

FISHERIES AND ANIMAL HUSBANDRY

Fishery and animal husbandry are two sectors which hold great promise in the development of the rural economy of Kerala. While the fishing sector has already been given a new outlook for speedy modernisation, the animal husbandry sector is yet to revolutionise its channels of development.

Fishery:

5.2 The total fish production in the State in 1966-67 was 2.35 lakh tonnes valued at Rs. 7.8 crores as against 2.22 lakh tonnes valued at Rs. 5.9 crores in the previous year. The production of marine fish alone was 2.28 lakh tonnes compared to 2.16 lakh tonnes in the previous year. The total production increased by 5.9% over the year while the marine fish production alone by 5.5%. However, the marine fish landings of 1966-67 constituted only 63% of that in 1964-65.

5.3 Of the total marine fish landings, oil sardine constituted 96.9 thousand tonnes (42.6%) prawns, 26.1 thousand tonnes (11.5%), and mackerel 19.6 thousand tonnes (4.2%). The landings in 1965-66 comprised of oil sardine 121.7 thousand tonnes (56.4%), prawns 18.3 thousand tonnes (8.5%) and mackerel 3.2 thousand tonnes (1.5%). The details of marine fish landings are given in Appendix 5.1.

5.4 The average beach prices of all marine fish in 1966-67 worked out at Rs. 0.32 per Kg. as against Rs. 0.25 per Kg. in 1965-66, the percentage increase being 28. The price of oil sardine went up from 15 paise in 1965-66 to 18 paise in 1966-67, of prawns from 97 paise to 103 paise and of mackerel from 43 paise to 47 paise over the years.

5.5 During 1966-67, a total of 216 mechanised boats were constructed of which 89 were in the public sector and the rest in the private sector. 31 boats were of 25' size and the rest of 30' and above. Compared to this, the total boats constructed in the previous year were only 77 of which those built by the public sector came to 52. By the end of March 1967 as many as 749 mechanised boats were constructed in the State under the public and private sectors together. The mechanised boats issued by the Government numbered 200 during the year as against 59 in the previous year. 153 fishermen were trained in the operation of mechanised boats at the fishermen training centres in Kerala in 1966-67.

5.6 The number of ice factories in the public sector during the year remained the same as in 1965-66. However, certain new ice plants are being erected at Kasargod, Cannanore, Thalayi, Quilandy, Ponnani, Azhikode, Willingdon Island, Alleppey and Attipra. Also a number of simple cold storage plants are under way in the interior regions to facilitate better marketing of fish and fish products.

5.7 53 new co-operative societies were added during the year, bringing up the total number of fishermen co-operatives in the State to 517 at the end of 1966-67. The total paid up share capital of the societies increased from Rs. 9.07 lakhs in 1965-66 to Rs. 10.95 lakhs in 1966-67, the increase being 21% over the year. The total assistance given by the State to the fishermen societies as share capital and long term loans amounted to Rs. 4.39 lakhs during the year, of which the long term amounted to Rs. 4.23 lakhs.

5.8 One remarkable feature in the development of Kerala fisheries has been the formation of the Kerala Fisheries Corporation during the year. All the boat building yards, ice factories and refrigeration plants in the State sector are brought under the Corporation of facilitate a co-ordinated approach to fish production and export. The Corporation during the first year of its activity exported 407 tonnes of frozen marine products for Rs. 42.84 lakhs. The performance of the Corporation in the next few years on the production and export fronts will determine the pattern and dimensions to which the Corporation activities have to be expanded in the years ahead.

5.9 The year 1966-67 witnessed substantial progress in the activities of the Indo-Norwegian Project. The Project had been mainly responsible for the development of mechanised fishing at Neendakara and Cochin. It is also developing a fishing harbour and fisheries station at Cannanore. The Project owns a small fleet of big trawlers which undertake experimental trawling in the deep sea waters of Kerala. One notable achievement of the Project in 1967 is the charting of a new fishing ground of approximately 1000 sq. miles between 150 fathoms and 200 fathoms off the Quilon Coast in Kerala. Fishing in several areas of this extensive bank has yielded catches even up to 800 kg. per hour. It is considered that a large vessel of 90ft. or more with facilities for processing and freezing on board with large storage capacity can work the grounds very profitably.

Animal Husbandry:

5.10 The per capita availability of milk in Kerala is placed around 2 oz. per day as against 5 oz. at the all India level. The number of milking cows and buffaloes according to the 1966 Livestock Census has been 4.83 lakhs and 0.67 lakhs respectively. This works out at the rate of 1 milking cattle and buffalo for every 35 people in Kerala in 1966. The position five years ago, in the State was the same as against one for every 13 persons at the all India level.

5.11 The annual yield of cows in milk in Kerala is about 420 Kg. per cow. In Punjab, Uttar Pradesh, Bihar and Andhra Pradesh, it is 780 kg., 710 kg., 665 kg., and 515 kg., respectively. Of all countries, Israel has the highest yield per milking cow; it is 4902 kg. per annum. Next to it comes Japan with about 4350 kg., followed by Netherlands 4207 kg., Denmark 3946 kg., U. K. 3797 kg. U. S. A. 3665 kg. and U. S. S. R. 1600 kg. Apparently there is much to be done to improve the breed and yielding capacity of the cattle in the country as a whole and the State in particular. The 1966 Livestock Census does not give any data relating to the milk production and yield of cows in milk and hence no comparison in the improvement of yield over the past is possible.

5.12 In a rational approach to the reorganisation of animal husbandry activities and upgrading of livestock, what is generally felt as important is the adoption of a strong policy in the elimination of scrub bulls. This has to be taken up simultaneously with an extensive programme for artificial insemination. With regard to the first there has been remarkable progress between the years 1961 and 1966. The breeding bulls declined in number at an average rate of 7.7% per annum. The male cattle used both for breeding and working declined even at a faster rate of 10.0% per annum. The buffaloes used exclusively for breeding has fallen at the rate of 12.9% per annum. At the same time the breeding cows and she-buffaloes registered an increase of 2.4% and 1.0% respectively over the years.

5.13 In 1966-67 four pig development blocks were newly started, making the total number of pig development blocks seven. Also the spade work for the establishment of a cattle feed manufacturing plant at Palghat and a Poultry Dressing Plant has been taken up.

5.14 The Indo-Swiss Project started at Madupetty with Swiss Collaboration for the development of fodder production, cattle breeding and dairy economy has been doing very good work. The project is planning to start a pilot project in the Peermade area for supplying the settlers of the area with breeding cattle. The objective is to examine the extent to which animal husbandry would improve the economy of the settlers so that farmers in general can emulate animal husbandry along with farming as a business proposition.

5.15 The Palghat Milk Supply Scheme started under the Third Plan was commissioned and handed over to the Palghat Co-operative Milk Supply Union in 1966-67. With this, the total number of milk supply schemes in operation will be three, the other two being at Trivandrum and Calicut. The Ernakulam and Kottayam Milk Schemes are scheduled to be commissioned in the next year. Preliminary construction works for the Alleppey Scheme were taken up during the year under review.

5.16 The Sewage Farm at Valiathura, Trivandrum started in 1961-62 is a scheme for the development of fodder by utilising the city sewage for irrigation. The total area under fodder cultivation in the farm in 1966-67 was 92 acres as against 42 acres in the previous year. The average yield of fodder produced during the year was 19.23 tonnes per acre as against 39.82 tonnes per acre in 1965-66. The decline in the yield is only due to the fact that the crop on 50 acres has been newly cultivated. The average sale price of fodder during the year was 3.3 paise per Kg. as against 2.9 paise in the previous year. r

CHAPTER VI

INDUSTRY AND MINING

The number of factories in the State rose from 2918 in 1966 to 2983 in 1967 and the factory employment from 1.95 lakhs to 2.01 lakhs. Out of the total working force of 10.9 lakhs persons in the industries sector as a whole, only about 17 per cent is engaged in factory units.

6.2 The factories of Kerala account for only 4.1 per cent of the total factory employment in India as against the State of West Bengal and Maharashtra which account for 20.4 per cent and 20.3 per cent respectively. For a State-wise distribution of factories see Appendix 6.1.

6.3 An analysis of the factory sector in Kerala during 1967 reveals that the State is dominated by food processing units like cashew, which employ nearly 53% of the factory workers. Cashew alone accounts for 92652 workers out of a total of 200684 factory workers. The industries in the State are thus mostly agro-based. Basic metal industries account for 1% of the factory workers. The table showing number and employment of factories in 1967 is provided in Appendix 6.2. An abstract of the table is given below:

Number and Employment of Factories in 1967

<i>Sl. No.</i>	<i>Name of Industry</i>	<i>No. of factory</i>	<i>No. of employees</i>
(1)	(2)	(3)	(4)
1	Food Articles	820	107415
2	Beedi and Cigars	66	2093
3	Textiles	253	16786
4	Coir	146	5930
5	Umbrella	18	498
6	Timber	460	11942
7	Paper	220	7880
8	Rubber	132	3576
9	Manure	10	4188
10	Pharmaceuticals	21	781
11	Soap	7	1193
12	Match	66	2773
13	Petroleum	9	1097
14	Building materials	227	14051
15	Glass and Pottery	10	887
16	Metal Industry	280	12538
17	Repair engine, building and manufacture of Bicycle	157	5124
18	Others	81	1929
	Total	2989	200684

6.4 The distribution of working factories in Kerala according to employment as on 31-12-1967 is brought out in Appendix 6.2. Out of the total of 2983 working factories at the end of 1967 as much as 85 factories employed less than 50 workers each. The proportion of factories in the size groups 1-49, 50-99, 100-499, 500-999 and 1000 and above was about 3%, 4%, 23%, 32% and 38% respectively. There were only 1129 factories in the State giving employment to 1000 and more workers. Even among them cashew factories with their age old techniques of production accounted for 238 in number.

6.5 The district-wise distribution of factories in Kerala as on 31-12-1968 indicates the uneven growth of industries as between the various districts or regions within the State.

**District-wise Distribution of working Factories and Employment
in 1967**

<i>Sl. No.</i>	<i>District</i>	<i>No. of factories</i>	<i>No. of employees</i>	<i>Rank in employment</i>
(1)	(2)	(3)	(4)	(5)
1	Trivadrum	.. 152	9929	7
2	Quilon	.. 424	85743	1
3	Alleppey	.. 298	13426	6
4	Kottayam	.. 265	9417	8
5	Ernakulam	.. 371	25126	2
6	Trichur	.. 505	17681	3
7	Palghat	.. 261	7805	9
8	Kozhikode	.. 347	17494	4
9	Cannanore	.. 360	14063	5
State Total		.. 2983	200684	

6.6 Nearly 43% of the workers are employed in Quilon District. This is due to the concentration of cashew factories in and around Quilon. Nearly 87% of the total employees in Quilon are employed in Cashew factories. Ernakulam District is next to Quilon with regard to employment. Trichur stands third in factory employment. Palghat District ranks as the ninth in regard to factory employment. However the district-wise factory employment figures are in no way a correct indicator of industrial development. Even though Ernakulam District comes only as second in factory employment; there is a heavy concentration of many important industries employing advanced technological methods. The district-wise details of factories and employment are given in Appendix 6.3.

6.7 As most of the units especially traditional industries employ low technology, the productivity of the industrial units is very low. With the result, low wage rates prevail for the factory workers when compared to other parts of India. A comparative statement of

industrial wage rates in the different States for the year 1966-67 separately for workers earning less than Rs .400 is given in Appendix 6.5 which shows that the average daily earnings of the factory workers in Kerala is the lowest in India.

6.8 The per capita daily earnings in Kerala in 1965 is Rs. 3.54 as against Rs. 6.13 for all India. The traditional industries like Coir, Handloom and Cashew, employing a large percentage of working population account for the low per capita daily earnings.

6.9 The production figures of some of the important industrial products like Cement, Coffee, Salt, Plywood, Yarn, and Cloth are given below. Cloth and Coffee have registered a slight increase in 1965-66 over 1964-65. A noticeable fall is seen in the production of yarn and plywood.

Production Figures in Selected Industries

<i>Sl.No.</i>	<i>Name of produce</i>	<i>Unit</i>	1964-65	1965-66
(1)	(2)	(3)	(4)	(5)
1	Manufacturing of hydro-ginated oil	.. Quintal	17249	17295
2	Tea	.. 100 Kg.	43612	43001
3	Coffee	.. M.T.	10143	12834
4	Salt	.. Qtl.	10	16
5	Yarn	.. 100 Kg.	12003	11160
6	Cloth	.. 1000 Metre	19118	19930
7	Plywood	.. Sq. metre	2563151	2485598
8	Cement	.. M.T.	43492	46886
9	Electricity generator	.. Million K.W.H.	903658	926359

Joint Stock Companies

6.10 During 1966-67, only one Public Limited Company and nineteen Private Limited Companies were newly registered in Kerala. 14 Companies (5 Public and 9 Private) were struck off while 26 companies (18 Public and 8 Private) went under liquidation. One Public Company became private during the year. In 1967-68 (April 1967 to December 1967 only) new registrations were 16 companies (1 Public and 15 Private). 14 Companies (3 Public and 11 Private) were struck off. 17 Companies (5 Public and 12 Private) were liquidated. One Public limited Company was transferred from this State to another State.

Number of Joint Stock Companies from 1957-58 to 1967-68

<i>Year</i>	<i>Public</i>	<i>Private</i>	<i>Total</i>
(1)	(2)	(3)	(4)
1957-58	508	704	1212
1958-59	471	663	1134
1959-60	436	618	1054
1960-61	435	604	1039
1961-62	409	598	1007
1962-63	413	620	1033
1963-64	406	625	1031
1964-65	397	631	1028
1965-66	379	631	1010
1966-67	356	634	990
1967-68	349	625	974

6.11 There was a reduction of nearly 18% in the number of public joint stock companies over the period 1961-1966 and it again declined by another 2% in 1967. But there was a net increase of 6% in the case of Private Limited Companies from 61 to 66 but it was reduced by 1.5% in 1967. On the whole there was a decrease of 4% during 1961 to 1966 and again another 2% decrease in 1967.

6.12 Even though there was a declining trend in the total number of companies a substantial increase could be observed with regard to both authorised and paid-up capital from 1961 to 1967 in public as well as Private Limited concerns.

Details showing authorised capital and paid up capital for 60-61, 65-66, 66-67 and 67-68

<i>Year</i>	<i>Authorised capital</i>			<i>Paid up capital</i>		
	<i>Public</i>	<i>Private</i>	<i>Total</i>	<i>Public</i>	<i>Private</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	3957.97	1782.55	5740.52	2407.62	634.57	3042.19
1965-66	16836.56	4107.81	20944.37	3352.67	963.06	4315.73
1966-67	17060.56	4164.51	21225.07	3508.86	974.44	4483.30
J1967-68	17180.56	4205.81	21386.37	3600.56	1163.78	4764.34

J (April 1967 to December 1967)

Government owned companies:

6.13 During the year 1965-66 among the six Government owned companies namely, Trivandrum Rubber Works, Trivandrum Spinning Mills Ltd., The Kerala Ceramics Ltd., Kerala Electrical and Allied Engineering Company Ltd., Travancore Plywood Industries Ltd., and Kerala Soaps and Oil Ltd., most of them were working satisfactorily. A brief statement showing the authorised capital, paid up capital, turn-over, profit or loss of the above companies in 1965-66 is given in Appendix 6.6.

6.14 All the companies have almost fully repaid the working capital loans taken from the Government when they started functioning. The Wage Structure prevailing in the Companies compares favourably with those prevailing in similar industries in the private sector. For example, in Kerala Soaps and Oil Ltd., the daily wage for a senior worker is Rs. 6 whereas in the Private Sector, it is only about Rs. 4. Similarly, for the lowest paid worker in the Kerala Soaps and Oils Ltd., the daily wage is Rs. 3.75 whereas in the private sector it is less than Rs. 3. All these concerns were made limited companies in 1964-65. In spite of labour strike, power cut and the difficulties in procuring essential raw materials like rubber and imported items like steel, chemicals etc., the Trivandrum Rubber Works made a net profit of Rs. 1.30 lakhs in 1965-66 after payment of Rs. 1.49 lakhs to Government by way of interest. The Trivandrum Plywood Industry Ltd. is paying a dividend of 10% to Government on the paid up capital. It made a profit of Rs. 3 lakhs in 1964-65 and Rs. 2.32 lakhs in 1965-66. Kerala Soaps and Oils Ltd. had to put up with heavy power cut during 1965-66. Nevertheless, it increased the turnover to the record figure of Rs. 1.21 crores and made a profit of nearly Rs. 0.29 lakhs.

6.15 Trivandrum Spinning Mills Ltd., the Kerala Ceramic Ltd., and Kerala Electrical and Allied Engineering Company had to incur a loss of Rs. 8.14 lakhs, Rs. 9.04 lakhs and Rs. 1.66 lakhs respectively during 1965-66.

6.16 The question of increasing the production and managerial efficiency of the enterprises owned, managed and controlled by the State Government is engaging the attention of the Government. In years to come, the Government enterprises will have to shoulder increasing responsibilities in respect of mobilising resources for overall development through the surpluses they create.

Traditional Industries:

The Traditional Industries occupy a vital place in the State's industrial set up. Of 10.88 lakhs of workers in the State engaged in the industrial sector in 1961, 83% was employed in small scale and cottage units. The industries which play a significant role in the small scale sector are the traditional industries of coir, handloom, cashew, etc.

6.18 Coir Industry employs nearly 4 to 5 lakhs of workers and more than 10 lakhs of people mainly depend on this industry for their livelihood. About 92 per cent of yarn production is in the co-operative sector. There are at present 543 coir service co-operatives in which Government have made till now an investment of Rs. 272 lakhs as share capital and working capital loans. During the year 1966-67 Government incurred an expenditure of Rs. 18.31 lakhs in this direction.

6.19 Coir industry has made a substantial contribution to the country's economy by way of earning valuable foreign exchange. 74,234 tonnes of coir and coir products to the value of nearly Rs. 11.1 crores were exported in 1965-66. However, as a result of intense competition from substitute products and the consequent difficulties in marketing the coir products abroad, there is a slump in the coir trade at present. A large number of factories have been fit of small producers and providing about Rs. 275 lakhs for coir development, the condition of the industry, particularly the condition of the ordinary coir worker remains unsatisfactory. An ordinary coir worker still gets less than Re. 1 per day.

6.20 Handloom industry in Kerala is another important traditional industry employing a large number of people. On the recommendation of the Textile Enquiry Committee of Government of India, a scheme for introducing power looms in the handloom sector was formulated and put into operation. Till the end of the Third Plan it was a centrally sponsored scheme. 500 power looms were purchased and distributed to 50 weavers' co-operative societies during the year 1960-61. All the above looms were commissioned during the Third Plan period in addition to the installation of 500 power looms as a second phase of the scheme. At present all the looms are not working to the full capacity on account of inadequacy of working capital and the general slump in the industry. 6,42,996 metres of handloom cloth were produced in 1966-67, out of which 25,582 metres were from Co-operative sector and the remaining from outside the co-operative sector. The production of powerloom cloth was 13.5 lakh metres, of the value of Rs. 15.6 lakhs. The solution to the present stagnation and crisis in the handloom industry lies in solving the marketing problems, particularly product development and sales effort.

6.21 Another important traditional industry in the State is cashew industry. 67% of the cashew factories are either individual proprietorship or partnership concerns; while private limited companies account for nearly 29%. Public limited companies and co-operative societies constitute only 2% of the total number of factories.

6.22 Next to jute, cashew industry is the largest dollar earner in India. 51,62,517 tonnes of cashew kernels were exported fetching a total of Rs. 27.94 crores as value in 1965-66, in addition to 1

crore litres of cashew shell oil of the value of Rs. 2.04 crores. Heavy concentration of this industry is found in Quilon. Nearly 89,000 persons are employed in this industry, out of which women constitute 92%. 45% of the total employment is in registered factories. The average earnings per annum by way of wages are Rs. 563 for male workers, Rs. 397 for female workers and Rs. 198 for children. The average daily earnings of a worker in cashew industry in 1965-66 was as low as Rs. 1.83.

Industrial Co-operatives

6.23 With a view to improving the conditions of small producers and eliminating exploitation of middle men, a number of industrial co-operatives were organised. As on 30-6-1966 there were 2880 industrial co-operative societies employing 1,06,916 persons. The total working capital of all these co-operatives was Rs. 559.91 lakhs. The details of industrial co-operatives as on 30-6-1966 are given in Appendix 6.7.

Rural Industries Projects

6.24 The programme under Rural Industries was sponsored by the Planning Commission in 1962 for the intensive and rapid industrialisation of rural areas. The main object of the scheme is to convert as far as possible the overpopulated agricultural communities into balanced agro-industrial communities so that a considerable number of unemployed persons in agriculture and the educated unemployed of the locality can be given employment in the industries set up under the programme. On this basis, out of the 45 projects started initially in India in 1962 two were in Kerala, one at Alleppey and the other at Kozhikode.

6.25 The various development programmes undertaken by the projects are in brief:—(1) Establishment of Training Centres for selected workers giving facilities for occupational training in selected trades, (2) setting up of common facility centres for bringing technological improvements in production methods and to provide the village artisans with common work sheds and other technical assistance to improve their efficiency and earning capacity, (3) setting up of production units to be given on hire purchase basis to entrepreneurs, and (4) to give financial assistance to existing and new industries in the form of supply of machinery on hire purchase, for construction of factory buildings and cash loans. Under the commercial schemes production units will be set up by the project and entrusted to private entrepreneurs who have to repay the entire cost with interests within a specified time.

6.26 151 units (54 at Alleppey and 97 at Kozhikode) have been given financial assistance. Under the commercial schemes two Straw Board factories and one Chemical Industrial Estate consisting of 8 different industries have been set up in Alleppey project

so far. In the Kozhikode Project area 7 industries have been commissioned under the commercial schemes. They are (1) Leather tanning, (2) Manufacture of footwear, (3) Manufacture of Glass Bottles, (4) Agricultural Implements, (5) Ice Plant and Cold Storage, (6) Synthetic cattle feed, and (7) Bone meal factory.

6.27 The Financial assistance given by the two projects for both commercial and other schemes during the Third Plan and in 1966-67 are presented in the following table.

Financial Assistance to the Projects

Project	Commercial schemes		Others		Total Rs. in lakhs
	During 3rd Plan	During 66-67	During 3rd Plan	During 66-67	
	Rs. in lakhs	Rs. in lakhs	Rs. in lakhs	Rs. in lakhs	
Alleppey	9.73	1.15	7.52	2.86	21.26
Kozhikode	9.00	1.09	9.37	11.06	30.52
Total	18.73	2.24	16.89	13.92	51.78

It is particularly noted that the Planning Commission has acclaimed the Rural Industries Projects in Kerala as the best in India.

Khadi and Village Industries.

6.28 The Kerala Khadi and Village Industries Board established in 1957 is the main agency which implements the khadi and village industries schemes in the State. Financial assistance for the development of khadi and 14 other village industries is being given by the Board.

6.29 The value of village industries products rose from Rs. 227.77 lakhs in 1965-66 and 236.83 lakhs in 1966-67. The production in 1966-67 was nearly 4 per cent higher than that in 1965-66. The major khadi production centre at Payyannur is run by the Board. The production of the centre in 1966-67 was to the value of Rs. 8.78 lakhs. There were 3,744 Spinners and 187 Weavers in the Centre by the end of 1966-67.

Industrial Estates

6.30 There are 18 industrial estates in the State. Out of these 4 have not yet been commissioned. In the 14 estates now working there are altogether 209 industrial units. With regard to the total number of units, the estates at Pappanamcode and Kozhikode top the list each with 26 units. The workers employed in the 14 estates number 1750. The consolidated expenditure of the 18 estates for 1967-68 (till the end of December 1967) was Rs. 6.43 lakhs. The corresponding figures for 1964-65, 1965-66 and 1966-67

were Rs. 14.98 lakhs, Rs. 30.63 lakhs and Rs. 14.95 lakhs respectively.

Industrial and Financial Corporations

6.31 With the object of promoting industrial activities in the State a number of institutions are now functioning. The chief among these are the Kerala Financial Corporation and the Kerala State Industrial Development Corporation.

6.32 The main function of the Kerala Financial Corporation is to grant loans and advances to industrial concerns, so as to accelerate the pace of industrial development in the State. From the inception of the Corporation upto 31-3-1967, 238 applications for loans amounting to Rs. 8.2 crores were received; and of these 174 applications were admitted and loans to the tune of Rs. 97.1 lakhs were sanctioned.

6.33 A statement showing the categories of industries that sought assistance from the Kerala Financial Corporation during 1964-67 is given in Appendix 6.9. Only an amount of Rs. 3.9 crores was however disbursed till 31-3-1967. The details of loans disbursed to the various industrial units by the Corporation as on 31-3-1967 and loans, disbursed to small scale industries under the agency agreement with the Government of Kerala as on 31-3-1967 are given in Appendix 6.10 and 6.11.

6.34 Kerala State Industrial Development Corporation Ltd. is entrusted with the responsibility to stimulate and assist industrial ventures in the State through its financial and technical services. During 1966-67 applications for long-term loans were received from five parties, out of which two were accepted. The total amount of loans sanctioned was Rs. 55 lakhs. Out of the 26 companies assisted by the Corporation during the period 1962 to 1967, 13 companies with a total capital cost of Rs. 10.43 crores commenced production before 31-3-1967. The total number of parties who applied to the Kerala State Industrial Development Corporation for financial assistance in the year 1965-66 was nine.

Minerals

6.35 Kerala's deficiency in the basic minerals such as coal, petroleum and iron is one of the serious handicaps hampering its industrial development. The mineral wealth of Kerala consists mainly of beach-minerals comprising of ilmenite, rutile, monazite, zircon sillimanite, clays, high grade quartz sand, limestone etc. Other minerals like mica, graphite, iron ore, lignite and soap stone are also found in the State though not extensively.

6.36 Beach-sand deposits containing concentrations of heavy minerals like ilmenite, rutile, monazite, zircon and sillimanite occur in Quilon district. The above beach-sands constitute the most

so far. In the Kozhikode places of Kerala. Ilmenite is the predominant mineral of these beach-sand deposits. An analysis of the 'sands' as mined in Chavara (in Quilon) follows:—ilmenite 65-77 per cent, zircon 5 per cent, Sillimanite 5—10 per cent, Monazite 1—1.5 per cent, Quartz 11 per cent. It is estimated that 32.28 million tonnes of ilmenite and 0.67 million tonnes of monazite are available in nine regions of the State so far investigated. The major use of ilmenite, at present is in the manufacture of titanium dioxide for uses of pigment plant. Now the Travancore Titanium products, Trivandrum, uses Quilon ilmenite for producing titanium dioxide. Its present capacity is 18 tonnes per day. The total annual capacity of the mineral processing plants to produce ilmenite is around 300,000 tonnes in a year. Originally exports provided the main outlet for the ilmenite so produced; but, of late, exports have dwindled.

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6.37 Monazite is another important universal sand whose present output is very negligible compared to its potential reserves. The production during the last three years has averaged only 180 tonnes. A similar situation obtains in regard to rutile production also. Even here the State enjoys a monopoly, but is not making the optimum utilisation of the mineral sand. Both production and exports are dwindling as can be seen from Appendix 6.13.

6.38 Some of the finest varieties of China clay are found in Kundara, Cannanore, Quilon and Trivandrum. Occurrence of good variety clay deposits has been reported from Ernakulam and Kozhikode. The production and sales of clay in 1967, were considerably higher than that in 1966 (vide Appendix 6.14).

6.39 A preliminary field study of the Geological survey of India has indicated that the State is endowed with magnetite ore deposits of about 400 million tonnes near Calicut. The detailed survey is to be taken up in 1968. The occurrence of bauxite ores in several parts of the State has also been reported by the Geological Survey of India. The improved natural resources position points to the prospects and potentialities for industrialisation in the coming years.

CHAPTER VII

POWER

Among the various sources, electricity from waterpower is the cheapest. Compared to other States, Kerala is in an advantageous position in this regard, having been endowed with abundant water resources. The hydro electric potential of the State is estimated at 2.2 million K.W. at 60% L.F. as against 40 million K.W. for the country as a whole.

7.2 A systematic start for the extensive tapping of the hydro power resources in the State was made in 1940 with the commissioning of the first stage of the Pallivasal Project. Since then there has been steady progress and the installed capacity of the State system as on 1-2-1968 is 528,500 K.W. The installed capacity of the system as on 31-12-1967 was 3,60,500 K.W. The projects in operation as on date are the following:

<i>Project</i>	<i>Basin</i>	<i>Installed capacity (KW)</i>
1. Pallivasal	.. Periyar	37500
2. Sengulam	.. do.	48000
3. Neriamangalam	do.	45000
4. Panniar	.. do.	30000
5. Sholayar	Chalakydy	36000
6. Poringalkuthu	Chalakydy	32000
7. Sabarigiri	.. Pamba	300000
Total		528500

7.3 Projects under different stages of execution are listed below:

<i>Project</i>	<i>Basin</i>	<i>Capacity (KW)</i>
1. Sholayar (Unit III)	.. Chalakydy	18000
2. Kuttiyadi	.. Kuttiyadi	25000 x 3
3. Idikki (1st Phase)	.. Periyar	130000 x 3

The details of generation and purchase of power by the State system, during the period 1962-67 are given below:

	1962-63	1963-64	1964-65	1965-66	1966-67
Electricity generated in the State (million Kwt.)	715.55	762.88	795.10	841.94	1083.11
Purchased from neighbouring States (million Kwt.)	59.66	78.89	97.20	116.48	77.99

7.4 During the year 1966-67, 34 centres were electrified, 24620 consumers were connected up and 9023 street lights were installed. The details are furnished in Table (8.1). During the year 1967, 3 units of Sabarigiri with an installed capacity of 150000 KW. was commissioned. On 26th January 1968 second unit of Sholayar with an installed capacity of 18000 KW. was commissioned bringing the installed capacity of the State system to 528500 KW. Sholayar 3rd unit and Kuttiyadi (3 units) are expected to be commissioned before 31-3-1969. Thus the installed capacity as on 31-3-1969 will be 621500 K.W.

7.5 The distribution of consumers and connected load as on 31-3-1967 is as below:

Category	Number of consumers	Connected load (K.W.)
(1)	(2)	(3)
1. Light and fans	318150	163970
2. Domestic heat and small power (commercial)	11238	23737
3. Industrial power (L.T.)	10236	110894
4. Industrial power (H.T)	309	216259
5. Irrigation and agriculture	8495	54942
6. Water Works and Sewage pumping	297	4343
7. Bulk supplies to licences and export	6	47257
8. Public lighting (No. of lights-116019)	..	4708
Total	348731	626110

7.6 The major consumer of electric power in the State is Industries. The rate charged to them are the lowest. Industries consume about 80% of the energy produced but contributes only about 48% of the revenue. On the other hand domestic consumption comes to 5.44% while it accounts for 22.3% of the revenue. The percentage distribution of consumption of energy and revenue collected during the year 1966-67 is given in the table

**Percentage Distributing of Consumption of Energy and Receipts
(1966-67)**

<i>Category of Consumers</i>		<i>Energy consumed (%)</i>	<i>Revenue collected (%)</i>
(1)		(2)	(3)
1.	Domestic heat and small power	0.93	2.6
2.	Domestic light and fans	4.51	19.7
3.	Commercial heat and power	0.65	2.2
4.	Commercial light and fans	3.33	15.8
5.	Industrial Power (L.T.)	8.26	13.5
6.	Industrial Power (H.T.)	71.90	34.9
7.	Public lighting	1.30	4.4
8.	Irrigation and Dewatering	3.36	3.3
9.	Water works	0.53	0.7
10.	Bulk supply	5.23	2.9
	Total	100.00	100.00

7.7 Power for domestic consumption will be costlier than that for industrial consumption for obvious reasons. Low tariffs are preferred to industries presumably to offer an incentive for starting industries. But it calls for closer examination whether it is absolutely necessary to undersell power to industrialists. In the initial stages power may have to be supplied at subsidised rates. But when the industry has stabilised it may not be necessary to subsidise them. It is only reasonable to fix the tariff on a no loss no profit basis, if not on a cost plus scales.

7.8 The cost at metre per unit of E.H.T. current is 5.04 paise and that for H.T. current is 7.80 paise. The average revenue from these (E.H.T. and H.T.) in 1967 is only 4.70 paise per unit. Thus State is subsidising the major industries to the tune of Rs. 51 lakhs per annum.

7.9 In the case of industries which are not power intensive an upward revision of these subsidised rates will not affect their financial position materially. Even in the case of power intensive industries there is not much justification in subsidising them when they have stabilised. Also, in the case of power intensive units, power is to be treated on a par with raw materials and when the price of all other raw materials has increased there is full justification in increasing the price of power also.

7.10 In fact, what must industries require is an assured steady supply of power, rather than cheap power. Now, that the supply position of the State system has improved it should be possible to

enter into contracts on a mutual penalty basis. This would undoubtedly go a long way towards the objective of industrialisation.

7.11 1967 marks the beginning of a new era of self-sufficiency in regard to power supply. Power cuts which used to be a regular feature in the previous years had not to be imposed during the year. In the very near future the supply position will be quite bright and the State is expected to reach a stage when we could export power to the neighbouring States.

CHAPTER VIII

TRANSPORT

Kerala's development is vitally linked with the maintenance of adequate transport facilities. The transport system of the State consists of 892 K.M. of railways, 17183 K.M. of roads, 1885 K.M. of inland waterways, 111 statute miles of airways and 13 ports including the major port of Cochin. Nearly three-fifth of the railway system is broad-gauge and the remaining two-fifths meter-gauge. The Cochin area alone is served both by the meter-gauge and broad-gauge. As the railway system is mainly coastal, it does not reach the major producing areas of agricultural commodities. The peculiar topographical conditions prevailing in the State is perhaps the major reason for the absence of a well developed railway system. The road system is fairly developed in contrast to the railway system. The State has an average road length of 44 K.M. per 100 Sq. K.M. as against the all-India average of 23 K.M. The waterways are well developed, but they play only a limited role in the development of the economy.

Road Transport:

8.2 While not much light can be thrown on the activities of the private sector in road transport industry, a clear account of the activities of the Kerala State Road Transport Corporation can be provided with the aid of the information made available by the Corporation. This organisation was formed in 1-4-1965. The Corporation's assets have increased from Rs. 579.04 lakhs on 31-3-1966 to Rs. 629.04 lakhs on 31-3-1967. The Corporation while drawing up their proposals for the period 1966-71 have selected 8 major road sectors in the State for complete nationalisation of road transport services. During 1966-67 nationalisation scheme in respect of the following road sectors was included in the Plan programme:

1. Ernakulam—Kottayam (via) Vaikom—Erattupettah (37 buses)
2. Kayamkulam—Punalur (15 buses)

These schemes were under implementation at the end of the year 1966-67. The programme for 1967-68, included purchase of new vehicles, servicing of buses in new routes, construction of new bus stations, offices and garages at Ernakulam, Alwaye and Kozhikode, and providing additional facilities at the Central Workshop.

8.3 There was a net addition of 85 buses, 4 lorries and 11 other vehicles to the operating fleet of the Corporation. The operating

fleet as at the end of 1966-67 consisted of 1006 buses, 57 lorries and 48 other vehicles, thus making a total of 1111 vehicles. The number of bus schedules increased from 697 to 768 during the year 1966-67. The Corporation vehicles operated about 700 lakhs of effective kilometres during the year which was 10.7% in excess of that operated in 1965-66. The passenger services run by the Corporation operated 688.11 lakhs of passengers as against 633.24 lakhs of effective kilometres and 1585.30 lakhs of passengers in 1965-66. Routes and distances operated and the number of passengers carried by the Corporation are provided in Appendix 8.2.

8.4 The income from passenger services in the year was Rs. 695.05 lakhs which shows an increase of 18.5% over that in 1965-66. The average earnings per kilometre of bus services increased from 94.7 paise in 1965-66 to 100.8 paise in 1966-67. The gross revenue receipts of the Corporation for 1966-67 was Rs. 751.66 lakhs and the gross expenditure Rs. 727.54 lakhs resulting in an overall net surplus of Rs. 24.12 lakhs. (Vide Appendix 8.3) The revenue and expenditure of the water transport section of the Corporation are also included in gross revenue and expenditure. Major centres of neighbouring States like Madurai and Mysore are connected by Express services. The Fast Passenger services have proved to be of considerable success.

Railways:

8.5 The railway system of the State is made up of 553 K.M. of broad-gauge lines and 339 K.M. of metre-gauge lines. The railway mileage per lakh of population in Kerala is only a third of that of all-India. The total railway mileage in the State has been remaining stationary for a number of years. Unless the railways are expanded, the industrial promotion of the State will become difficult in the coming years. The Cochin region is served both by the broad-gauge and metre-gauge lines, but the flow of goods from the South (which is served only by the metre-gauge) to the North is not smooth owing to the change of gauge at Ernakulam. With the rapid growth of the industrial complex in and around the Cochin-Alwaye region, the pressure of traffic in the region has increased considerably. Cochin is a major port handling a substantial portion of the export-import trade of the State and hence the urgent necessity to link Cochin with other areas of the State with an efficient railway system.

8.6 In 1964 the railways in Kerala handled about 1.15 million tonnes of incoming goods and 0.58 million tonnes of outgoing goods. Railways will have to play an increasingly important role, in the coming years. The National Council of Applied Economic Research in their Techno-Economic Survey (1959) estimated that by 1971 the volume of goods traffic in the State would be of the order of 9 million tonnes. According to the NCAER the railways will have

to bear atleast a third of this load. Goods for export, especially plantation products from Kottayam District, cashew kernels and shell liquid from Quilon District, fish and coir from the eas South of Alleppey can all be transported more efficiently if the railway system is further developed and the delays due to the break of gauge is avoided by connecting the metre-gauge line running from Trivandrum to Ernakulam into a broad-gauge line. This in addition will help to link New Delhi with the State capital on a direct line.

Inland Navigation:

8.7 The backwaters, navigable rivers and canals in the State contribute to a fairly good inland navigation system. The State has a total length of 1885 K.M. of inland waterways. The West coast canal system which starts from Tivandrum stretches upto Hosdurg and has a total length of 555 K.M. The total expenditure incurred by the Water Transport section of the Transport Corporation continued to be higher than the revenue receipts. While the expenditure in 1966-67 was Rs. 10.39 lakhs, the receipts totalled only Rs. 9.71 lakhs. The net deficit in 1966-67 was 0.17 lakh more than that in the previous year (Vide Appendix 8.4). The Corporation possessed a fleet of 11 boats for operating the ferry services at the beginning of 1966-67. During the year one more boat was built and commissioned for service. Thus at the end of 1966-67 the Corporation had 12 boats for ferry service with a total seating capacity of 1678.

Ports and Harbours:

8.8 There are at present two intermediate ports and ten minor ports besides the major port at Cochin. On a rough estimate these ports handle goods worth Rs. 200 crores annually. All the ports are lacking even the minimum amenities required. The Master Plan prepared by the Government in 1960 estimated that an amount of about Rs. 9 crores is required for the overall development of these ports to meet the increased volume of traffic.

8.9 During the year under review, there was a programme for the construction of fishing harbours at Vizhinjam, Mopla Bay, Balia Pattam, Beypore and Azhikode. Considerable progress has been made at Vizhinjam and Mopla Bay. At the remaining centres also work progressed according to schedule. Preliminary work for the development of the fishing harbour at Ponnani was also undertaken.

8.10 The State Government have entered into an agreement with Indopol Company for the preparation of a feasibility report about the development of the minor ports in the State. The work of the Company is in progress.

8.11 The present plight of the Cochin harbour which once held out great promise of spectacular development, continues to cause concern to the rapid growth of the State's economy especially in the sectors of trade and tourism. Inadequate facilities and indifferent maintenance hamper the normal functioning of the harbour. Large Cargo ships and passenger liners skip Cochin now-a-days, as they cannot enter or leave the harbour which needs dredging. It is hoped that the Cochin ship-yard project, which has hitherto not been taken up for implementation, will be accorded high priority in the formulation of the next plan.

CHAPTER IX

EXPORT-IMPORT TRADE

The year 1966-67 showed a further increase in foreign exports from the State. The value of foreign exports during 1966-67 totalled Rs. 137 crores as against Rs. 90 crores during the previous year. This increase was, however, partly due to the change in the value of the Rupees; and partly due to increase in quantum. In respect of exports, significant increase in quantity was noticeable only in the case of marine products and coffee. The performance of the major export earners of Kerala viz., Cashew Kernels, coir and coir products, pepper, coffee, tea and marine products is being reviewed below:—

Cashew kernels

9.2 The cashew processing industry has earned foreign exchange worth Rs. 45.19 crores against Rs. 27.73 crores during 1965-66. Exports of processed kernels were to the tune of 50,000 tonnes valued at Rs. 43.52 crores during this period. Cashew shell liquid worth Rs. 1.67 crores was also exported during the same period. The U.S.A. continues to be the largest buyer of Indian cashewnuts, lifting as much as 23,941 tonnes of processed kernels during the first 11 months of 1967. This exceeded the level of exports attained during the corresponding period in the previous year by 2087 tonnes. The Russian at take had slightly decreased during January-November 1967. It was only 11442 tonnes compared with 13232 tonnes in January-November 1966. East Germany continued to be the next important buyer of Cashew kernel followed by the U. K. The U. K., U. S. A. and Japan were the important buyers of the by-product of the cashew processing industry. The emergence of mechanised processing units in some of the African countries from where the Indian factories have been getting their raw material has become a threat to the future supplies from that source. It has therefore become imperative for the country to step up the production of cashew nuts. As part of the efforts to raise indigenous production of raw cashew nuts, which should ultimately feed the processing units in the country, the Central Government has sanctioned a package scheme for cashew cultivation in the four southern states—Kerala, Madras, Mysore and Andhra. The total area to be cultivated under the scheme is 12000 acres. Growers will be given financial assistance by the Government, including loans and subsidies under the scheme.

Coir and Coir products.

9.3 Exports of Coir and Coir products though showing a slight decline in volume, have earned about 50% more in 1966-67 compared

to the previous year. Presumably this increase in the value of exports from Rs. 10.19 crores in 1965-66 to Rs. 14.91 crores in 1966-67 was due mainly to the change in the exchange value of the Indian rupee in June 1966. The U.K. is one of the important markets for Kerala's coir goods. Kerala's coir exporters have been adversely affected by the pound devaluation. Coir goods have become costlier in the U.K. on account of devaluation. To accentuate this, the imposition of the credit squeeze in Great Britain has worsened the prospects of exports to that country. The problem of stagnant exports assumes added importance in the context of the decision in November 1967 of the British Government to devalue the pound sterling

9.4 The future prosperity of the coir industry depends to a very great extent on its ability to sustain and expand the foreign markets for its products. The Indian-made coir mattings which are produced on handlooms do not compare favourably with the mattings manufactured on power looms on the continent. It is for this reason that the manufacture of our coir mattings stands in need of immediate improvement and modernization. It has been decided to mechanise one-third of the matting sector. The Coir Board has already initiated steps in this direction, besides undertaking exploratory work for the development of a suitable composition to provide nonskid backing surfaces to mats and mattings. There is wide scope for the coir industry in the fields of acoustic control heat insulation, etc. It should be possible for the coir industry to produce a satisfactory cushioning material particularly with the rapid strides achieved in the production of rubberised coir. The industry has to look to modern developments and techniques. The future growth of the coir industry rests also on the reorganisation and strengthening of the cooperative sector so that they can improve their performance both in the field of technology and marketing. A recent welcome development was the announcement of the Government of India on 8th February, to completely exempt from export duty Coir manufacturers. In addition, the duty on coir yarn has been scaled down from the existing 25% to 15% ad valorem. These concessions, it is hoped will help to brighten the prospects of Coir exports.

Pepper

9.5 Pepper exports during 1966-67 declined by 4000 tonnes in comparison with the previous year, but the earnings rose by about a crore of rupees. Pepper market is a very sensitive one characterised by wide and frequent fluctuations. To a considerable extent Kerala's pepper exports are conditioned principally by the behaviour of the New York and Bombay markets as well as by the prevalent political and economic situation in Malaysia and Indonesia. Indonesian pepper has a price advantage over Indian pepper and this hampers India's pepper exports to U.S.A. Only

in the years of short-fall in Indonesian production do U.S. buyers generally show active interest in Indian pepper. Kerala's pepper is exported to nearly 60 countries in the world. But U.S.A. and U.S.S.R. together account for about 50%. Another competitor to Indian Pepper in the U.S. market is Brazil whose share has increased from 3.5 to 14.7% between 1959 and 1965. Brazil's crop has increased four times in the decade 1957-67 from about 2500 tonnes to 10000 tons. A further increase cannot be ruled out in view of the enormous size of that country. An advantage which both Brazil and Indonesia enjoy to the great detriment of India is that they have very little home consumption. They are able to under-cut the price of Indian Pepper to a large extent. Any sizeable increase in their crops, would make further inroads into the established export markets of India. The white pepper production in Kerala continues to be insignificant and this is a handicap to the entry of Indian Pepper to the U.K. and the prosperous market of the European Economic Community (excepting Italy). The above region which absorbs roughly 20% of the world's pepper trade places a premium on white pepper.

9.6 A programme for expanding pepper production by 40% and probing the possibilities of developing white pepper has been drawn up. Considering this aspect as well as the benefit accruing from the devaluation of the rupee the possibility of an increase in the volume of pepper exports, in the years to come cannot be ruled out. However, the potential is limited by the moderate rate at which the aggregate foreign consumption is growing. To the extent that India succeeds in organising commercial production of white pepper, it can improve its share in the West European markets. It may be mentioned here that talks are underway between the Indian and Indonesian Governments towards an attempt at stabilising the international prices of black pepper and also the maintenance of parity in the prices of black pepper exported by the countries.

Tea

9.7 Tea exports accounted for Rs. 28.73 crores in 1966-67 as against Rs. 22.10 crores earned during the previous year. Though the value of exports increased due to change in the exchange value of the rupee, the volume had dropped by approximately 6000 tonnes. Though devaluation was expected to give a fillip to tea exports by making Indian tea cheaper in foreign markets, this did not actually materialise. Re-imposition of the export duty abolished in March 1963, at the rate of Rs. 2 per Kg., simultaneously with devaluation, had an adverse effect on tea exports. An FAO survey of the recent developments in the world Food and Agriculture situation, stated that the world trade in tea during the first half of 1967 showed some recovery despite lighter shipments from East Africa (because of the drought there) but the average prices at the London auctions

during the first eight months were generally lower than a year earlier. The closing of the Suez canal had little effect on the London market, but some pressure on prices were expected, with the inflow of the diverted supplies. Production was likely to be larger than in 1966 in India, whereas it would be lower in Ceylon. The export prospects in 1968 will chiefly depend on the U.K.'s buying policy. In view of the high cost of credit in that country, buyers there are likely to cut down their purchases. Fortunately for the tea producers, there is an expanding home market. However, a limiting factor will be the scarcity and high price of sugar. A welcome feature is the signing of the Indo-Ceylon Tea Agreement which provides for collaboration in marketing and research for improving the economic viability of the tea industries of Ceylon and India. On February 6, 1968 the Finance Ministry of the Government of India announced that the export duty on teas, the value of which exceeds Rs. 8 per Kg. has been reduced and a uniform rate of 20% ad valorem less 24 paise per Kg. has been prescribed as against the existing three rates of duty. This decision has been taken in line with the Government's general policy to keep the performance of exports under constant review and in the light of the various representations received from the trading interests from time to time

Marine products:

9.8 This is an export item in which Kerala has been making a headway in recent years. In 1966-67 the export earnings amounted to Rs. 15.20 crores which was more than double the previous year's exports of Rs. 7.36 crores. The Kerala coast abounds in commercially important species like Sardines, prawns, mackerel, Sharks, silver bellies etc. Canned and frozen prawns, dried fish and frozen frog legs find a ready market in the U.S.A., Australia, Japan, Hong-kong, Ceylon, U.K. and France. Future exports will depend more and more on aggressive selling, consumer packaging and effective promotion. This must be backed up by modern canning methods and facilities which will make the growth in marine exports possible. Efforts to improve the efficiency of the craft and the return for the investment which continue to receive adequate attention. A suitable climate by way of loan assistance, handling and freezing services should be created. The Industrial Development Bank of India is considering the proposal to give credit for fishing vessels, cold storage etc. under the priority sector. In addition it should also be feasible to utilise the non-plan resources available from institutions like the Agriculture Re-finance Corporation, the L.I.C. etc. for fisheries schemes including operation of a fleet of boats, marketing etc. under the cooperative sector. Development of fishing industry on modern lines will help to improve the conditions of a considerable section of the population depending on this important industry for their livelihood.

Other commodities:

9.9 During 1966-67, export earnings of Lemongrass oil have gone up in sharp contrast to the experience of the previous year. Improvement is discernible in the exports of Rubber manufactures, Wood and Timber and Coffee, indicating of demand conditions for these products in the markets abroad. Cardamom has recorded a leap forward. The exports earnings have almost quadrupled from Rs. 61.83 lakhs to Rs. 233.04 lakhs. Cardamom found a good market in 1965-66 in the Middle-East and in Scandinavia.

Imports:

9.10 Foreign imports bill totalled Rs. 73.23 crores during the year 1966-67 as against Rs. 71.92 crores in 1965-66. The principal items imported were raw cashew kernels and foodgrains which together constituted about 63% of the total imports.

EDUCATION, HEALTH AND OTHER SOCIAL SERVICES

Kerala is the most literate State in India. According to 1961 census, Kerala leads the States in India with 46.8% literacy. (See Appendix 10.1) In the case of both male and female literacy Kerala comes first, with 55.0% in the case of males and 38.9% in the case of females. The literacy rates of the districts of Alleppey, Kottayam, Ernakulam, Quilon and Trichur are above the State average. Alleppey district recorded the highest proportion of literates and Palghat the lowest (vide Appendix 10.2). The proportion of literates to the total population shows substantial increase from year to year and has reached the level of about 55%.

10.2 About 38.6% of the State's expenditure under Revenue Account (1967-1968) was on Education. The per capita Government expenditure on education stood at Rs. 18.48 in 1966-1967 as against Rs. 15.19 in 1965-1966 (vide Appendix 10.3). The per capita Government expenditure on education in the various States is given in Appendix 10.4 and it could be seen that the per capita expenditure on education is the highest in Kerala.

10.3 Expenditure on general education accounts for about 90% of the total Government expenditure on education. Appendix 10.5 presents data relating to the Government expenditure for general school education for the years 1961-1962 to 1966-1967.

General Education (School standard) :.

10.4 There has been an increasing demand for schools and generally the number of schools is increasing every year. This has to be viewed against the fact that many of the existing schools are badly housed. Shift system has been introduced in standards I, II and III of a large number of lower primary schools particularly in Travancore-Cochin area. The number of students receiving instruction under the shift system in the first three standards formed 46% of the total in 1965-1966. Appendix 10.6 shows the growth of schools in Kerala from 1957-58 to 1967-1968. The prevalence of shift system has adversely affected the quality of education.

10.5 Private Sector plays an important role in the field of general education in the State. Of the total number of 10691 schools in the State in 1967-1968, 6656 schools (62%) are under private management.

10.6 Enrolment in Schools for general education is increasing steadily. There was 5.7% increase in enrolment during 1966-1967 over the previous year. The stage-wise increase in enrolment

is furnished in Appendix 10.7. The growth of school enrolment during the period 1957-1958 to 1966-1967 may be seen from the following table.

Enrolment in Schools for General Education 1957-58 to 1966-67.

Year	Number of Students (in lakhs)		
	Boys	Girls	Total
(1)	(2)	(3)	(4)
1957-1958	15.91	12.51	28.42
1958-1959	16.66	13.58	30.24
1959-1960	17.11	14.03	31.14
1960-1961	17.87	14.79	32.66
1961-1962	18.88	15.74	34.62
1962-1963	19.68	16.54	36.22
1963-1964	20.74	17.45	38.19
1964-1965	21.73	18.37	40.10
1965-1966	22.58	19.10	41.68
1966-1967	23.71	20.34	44.05

10.7 Consequent on the increase in enrolment, during 1965-1966 89 High Schools and 80 U. P. Schools were allowed to work in session in order to relieve the pressure of over crowding. The total number of students under sessional system was 112491 in High Schools and 54846 in U. P. Schools.

10.8 Of the 124822 teachers working in standards I to X during 1965-1966, 12840 were untrained; and about 70% was in the private schools. The number of teachers for general education increased from 84185 in 1957-1958 to 124822 in 1965-1966.

10.9 178242 candidates appeared for the March 1967 S.S.L. Examination and of these 71338 (40%) came out successful. The problem of wastage in general school education deserves attention. It has been estimated that the extent of wastage in the lower primary and upper primary stages in 1965-1966 was of the order 21% and 25% respectively. The wastage in secondary stage was about 37% (excluding those who failed in the S.S.L.C. Examination). A study of the decade 1957-67 revealed that out of 100 students admitted in standard I, only 27 students continue their studies up to standard X. Out of these 27 students only 11 came out successful in the S.S.L.C. Examination in their first attempt.

Professional and Special Education:

10.10 Of the 105 Teachers' Training Schools, 74 are managed by private agencies. During the year 1966-1967, the total intake capacity was 7600. The district-wise details regarding the Teachers' Training Schools

Appendix 10.8. In order to improve the efficiency, the total number of seats in Teachers' Training Schools has been reduced to 6680 during 1967-1968. It is roughly estimated that the future demand for trained teachers can be met if the present rate of admission is maintained. Three Nursery Training Schools are functioning in the State with an intake capacity of 120.

10.11 Excluding the 3 women's polytechnics, there are 16 general polytechnics in the State with a sanctioned intake capacity of 2420 during 1967-1968 as against 2320 in 1966-1967. District-wise distribution of polytechnics and sanctioned intake are furnished in appendix 10.9. Widespread unemployment among diploma holders turned out by the polytechnics currently observed is likely to worsen at the present rate of admission.

10.12 During 1967-1968, there were 3 women's polytechnics with an annual intake capacity of 240 imparting training in Secretariat Practice and Stenography, draughtsmanship in Civil Engineering, Electronics and Costume design and dress making.

10.13 There were 35 Industrial Training Institutes during the year 1967-68. Of these 25 were under private management. The district-wise number of Industrial Training Institutes and total number of seats are furnished in Appendix 10.11. The problem of acute unemployment is facing the Industrial Training Institute trainees also.

10.14 There are also 20 Junior Technical Schools in the State with an annual intake capacity of 1200. The 5 Survey Training schools, one each in the districts of Trivandrum, Kottayam, Ernakulam, Kozhikode and Cannanore imparts training in chain survey higher survey etc. There were 7 schools for handicapped children—5 Departmental and 2 private—during 1966-67.

10.15 During 1967-1968, there were 17 general Nursing Schools and 17 auxiliary nurse-midwifery schools in the State with an annual intake capacity of 614 and 343 respectively. District-wise details are furnished in Appendix 10.11.

Higher Education:

10.16 There were 106 Arts and Science Colleges in the State during 1966-67. The enrolment in the Arts and Science Colleges increased from 105184 in 1965-1966 to 112539 in 1966-1967. The number of Colleges and students admitted during 1965-66 and 1966-67 in each district are given in Appendix 10.12. The number of students enrolled in Arts, Science, Oriental Studies and Commerce faculties was 69997 boys and 42954 girls in 1966-1967 as against 63552 boys and 39022 girls in 1965-66 recording an increase of 10.14% in the case of boys and 10.08% in the case of girls.

10.17 During 1966-67 there were 6 Engineering Colleges with an intake capacity of 1160 as against 1110 in 1965-66. The total number of students in Engineering Colleges was 4890 boys and 24 girls in 1966-1967 as against 4690 boys and 245 girls in 1965-1966 registering an increase of 11.26% in the case of boys. The possibilities for starting new courses important in the present context of economic development require urgent examination.

10.18 There were 4 medical colleges in the State during 1966-1967 with an intake capacity of 545 and one Dental College with an intake capacity of 30. The enrolment during 1966-67 was 2030 boys and 735 girls as against 1886 boys and 659 girls during 1965-1966 recording an increase of 7.64% in the case of boys and 11.53% in the case of girls. The capacity of the Dental College is not fully utilised at present. The actual intake in the Dental College is given below :

<i>Year</i>	<i>Sanctioned intake</i>	<i>Actual intake</i>
1960-61	20	27
1961-62	30	30
1962-63	30	28
1963-64	30	27
1964-65	30	19
1965-66	30	22
1966-67	30	21

10.19 The annual intake capacity of the Agricultural College is 80 and that of Veterinary College is 50. The total enrolment in Agricultural College was 249 boys and 37 girls in 1966-67 as against 205 boys and 33 girls in 1965-66 and in the Veterinary College was 207 boys and 16 girls in 1966-67 as against 205 boys and 33 girls in 1965-66.

10.20 There were 19 Teachers' Training Colleges—4 Departmental and 15 private—in the State during 1966-67. The enrolment in Teachers' Training Colleges was 993 boys and 108 girls in 1966-67 as against 1145 boys and 1253 girls in 1965-66 recording a decline of 13.28% in the case of boys and 13.73% in the case of girls. Taking into consideration the future enrolment in standards VI to X, it seems necessary to reduce the present intake capacity of the B.Ed. degree course. The district-wise distribution of Teachers' Training Colleges is furnished in Appendix 10.13.

10.21 There were 2 Law Colleges in the State during 1966-67. The enrolment during 1966-67 was 666 boys and 57 girls as against 424 boys and 45 girls in 1965-66 registering an increase of 57.08% in the case of boys and 26.67% in the case of girls.

10.22 In Ayurveda College, Tivrandrum affiliated to the Kerala University, the enrolment during 1966-67 was 249 boys and 37 girls as against 205 boys and 33 girls in 1965-66. Besides this there is the Government Ayurveda College at Trippunithura and another private Ayurveda College at Kottakal. The Homoeo College at Kuruchi (Kottayam) is imparting training in Homoeo system of medicine.

Health Services:

10.23. Excluding Jammu and Kashmir, the per capita government expenditure on health services is highest in Kerala and is estimated at Rs. 5.28, in 1966-67 as against Rs. 4.49 in 1965-66. The per capita Government expenditure on health services during 1966-67 in the various States is given in Appendix 10.14.

10.24 The number of medical and public health institutions increased from 369 in 1957-58 to 503 in 1966-67 and the number of beds increased from 11959 in 1957-58 to 19950 in 1966-67. The district-wise distribution of the institutions and their bed strength are given in Appendix 10.15. Data relating to the growth of the number of medical institutions and beds in Kerala from 1957-58 onwards is given below:

<i>Year</i>	<i>Number of Institutions</i>	<i>Number of beds</i>
(1)	(2)	(3)
1957-58	369	11959
1958-59	382	12352
1959-60	390	12810
1960-61	397	13978
1961-62	422	14108
1962-63	437	15753
1963-64	456	16681
1964-65	479	17636
1965-66	491	18526
1966-67	503	19950

10.25 The number of beds available per lakh of population during 1966-67 was 102 and the norm suggested by Mudaliar Committee (one bed per 1000 population) has been surpassed. The bed population ratio is below the State average in the districts of Quilon, Kottayam, Palghat, Kozhikode and Cannanore. It is almost double that of the State average in Trivandrum district. The number of beds available per lakh of population in each district in 1966-67 is given in Appendix 10.16.

10.26 During 1966-67, there were 40 Ayurvedic Hospitals with a total bed-strength of 471. More over, there were 218 dispensaries in the State (Vide Appendix 10.17).

10.27 The family planning programme was introduced in the State in 1955. By the end of 1966-67, there were 1446 Family Planning Centres in the State. Facilities are provided in all the 143 Primary Health Centres for sterilisation and I.U.C.D. insertion. In addition to this there were 18 Mobile Family Planning Units in 1966-67. The total number of sterilisation operations conducted upto November 1967 is 54039.

10.28 The programme of I.U.C.D. insertion was started in the State in July 1965. The details of I.U.C.D. insertions are furnished below:

<i>Year</i>	<i>No. of I.U.C.D. insertions</i>
1965	23062
1966	43517
1967 (up to November)	34178

Welfare of Backward Classes:

10.29 According to the 1961 census, scheduled castes and scheduled tribes form 8.4% and 1.2% of the total population in Kerala. The major activities of the Government for the welfare of backward classes are educational concessions, housing, water supply and health services.

10.30 Education is the most important item of work taken up by Government for the uplift of backward classes. All students belonging to scheduled castes and scheduled tribes are exempted from payment of all kinds of fees at all stages of education for two years in each class without any restriction to the income of their parents. These students are also given lump sum grant ranging from Rs. 3 to Rs. 40 in pre-matric classes and from Rs. 60 to Rs. 200 in post-matric classes. The students studying in post matriculation classes are also given boarding and lodging charges and pocket money if they reside in recognised hostels and a monthly stipend of Rs. 40 if they attend colleges from their houses. All these benefits are given to other eligible communities also. During the year 1966-67, 301139 students in pre-matric classes and 1329 in vocational classes and 30442 students in post-matric classes and 4365 in technical and professional classes were benefited by this programme. The total amount spent under this was of the order of Rs. 138 48 lakhs. Four students studying outside the State were also given financial help. Government of India scholarships were given to 2913 students and an amount of Rs. 779147 was spent under this item.

10.31 For the benefit of scheduled castes and scheduled tribes students 29 welfare hostels, 6 cosmopolitan hostels, 18 subsidised hostels and 39 residential basic schools were run during the year.

10.32 During the year 1966-67, sanction was accorded for the construction of 106 houses and of these 62 were completed.

Water Supply and Sanitation:

10.33 During the year 1966-67, none of the urban water supply schemes taken up for execution was completed. The works of the following urban water supply schemes are in progress.

1. Trivandrum Water Supply Scheme (Augmentation)
2. Kozhikode Water Supply Scheme (Augmentation)
3. Cannanore-Tellicherry Water Supply Scheme
4. Badagara Water Supply Scheme
5. Shoranur Water Supply Scheme
6. Perumbavoor Water Supply Scheme
7. Ernakulam-Mattencherry Water Supply Scheme
8. Sherthalai Water Supply Scheme
9. Vaikom Water Supply Scheme
10. Kayamkulam Water Supply Scheme

In addition to the above, at the beginning of the year 1967-68, there were 171 water supply schemes under execution in the rural areas and of these 55 have been completed so far.

CHAPTER XI

EMPLOYMENT SITUATION

One of the serious problems affecting the economic development of Kerala is the prevalence of wide spread unemployment and under-employment. The factors which influence such a state of affairs are the increasing pressure of population on land, seasonal nature of agricultural operations and the lack of supplementary industries, the uneconomic size of holding and the ineffective system of marketing and distribution. The development of small scale industries is still in its infant stage. There is large scale unemployment and under-employment in coir, cashew, handloom and similar other industries. For instance, in the organised sector of the coir industry employment fell from 6408 in 1965 to 5930 in 1966. On the whole, a similar trend was observed during the last few years. Educated unemployment is the most acute problem which the State faces at present. Even though the development activities considerably enlarged the scope of employment in the services sector, there is large scale unemployment even among the technically qualified personnel like Engineers, Craftsmen etc. The heavy registrations at the Employment Exchanges gives only a partial view of the existing unemployment in the State.

11.2 The unemployment survey conducted by the Bureau of Economics and Statistics during November-December 1965 reveals that there are about 5.5 lakhs unemployed and 54.7 lakhs employed persons in the State by the end of 1965. Even among the employed persons about 12% have work only less than 15 hours, 18% have work between 15 to 28 hours; about 25% have work between 29 to 42 hours and about 45% have work over 42 hours in a week. Thus it can be seen that among the employed persons about 55% have work less than 42 hours during a week. This gives an idea of the extent of underemployment among the employed persons in the State.

11.3 Out of the 5.5 lakhs unemployed persons about 2.5 lakhs are seeking employment and the remaining persons though not seeking work are available for it. The breakup of these unemployed persons according to their educational standard, reveals that among those who are seeking employment 42% are matriculates and above and among those who are available for work, 13.4% have this level of education. This shows that educated unemployment is a serious problem in the State.

11.4 A sectoral breakup of the employed as revealed from the above survey shows that 55% are employed in the primary sector.

(Agriculture and allied activities), 17% are in the secondary sector (Manufacturing) and 28% are in the tertiary sector.

11.5 The Employment Exchanges working in the State are providing employment service to the employers and employment seekers. Statistics relating to the placings and registrations at the Employment Exchanges serve as an indicator of the employment situation in the State. The registrations in the Employment Exchanges include those who are already employed, but seeking better employment. Similarly all the unemployed persons may not register their names in the Exchanges. Therefore it is difficult to assess the actual unemployment position in the State using the data of the Employment Exchanges.

11.6 The data regarding the number of placings and registrations in the Employment Exchanges reveals that the number of registrations has increased considerably during 1967 (more than 13% over the previous year) whereas during 1967 the number of placings has decreased by about 8% over the year 1966. The average number of employers using the Employment Exchanges has also increased during 1967. The details are given in the following table:

<i>Item</i>	1963	1964	1965	1966	1967
No. of registrations ..	141878	137379	140350	137030	154918
Number of placings ..	18187	14024	18378	16904	15617
Monthly average number of employers using the Exchanges	366	337	434	464	512*

* Average for the first nine months of the year 1967.

11.7 The distribution of the number of candidates on the Liv Register as on 31-12-1966 and 31-12-1967 is given in the subjoined table.

<i>State/District</i>	<i>No. of candidates on live register as on 31-12-1966</i>	<i>No. of candidates on live register as on 31-12-1967</i>
KERALA ..	157156	179479
Trivandrum ..	38768	46125
Quilon ..	19338	22570
Alleppey ..	12948	15410
Kottayam ..	13070	13336
Ernakulam ..	23313	27465
Trichur ..	12000	13352
Palghat ..	9001	9414
Kozhikode ..	19513	21091
Cannanore ..	9205	10716

11.8 The occupational distribution of employment seekers in Live Register of the Employment Exchanges as on 31-12-1966 as given in the following table.

Sl. No.	Occupational Division	No. of persons		
		Men	Women	Total
1	Total	119086	60393	179479
2	Professional, Technical and related workers	9683	13494	23177
3	Administrative, Executive and Managerial workers	530	229	759
4	Clerical and related workers	6801	6699	13500
5	Sales workers	22	6	28
6	Farmers, Fishermen and related workers	772	864	1636
7	Miners, Quarrymen and related workers	12	..	12
8	Workers in Transport and communication occupations	6618	370	6988
9	Craftsmen, production, process workers and workers not elsewhere classified	14157	1136	15293
10	Service, Sports and recreation workers	4058	6941	10999
11	Workers not classified by occupation	76433	30654	107087

11.9 The quarterly indices of employment, published by the Directorate of National Employment Services, Kerala shows that private sector employment has been declining while public sector employment maintains an upward trend. The indices of employment in the public and private sectors are presented in the following table.

Indices of Employment

(Base 31-3-1966=100)

Period	Private sector	Public sector	Combined
31-3-1966	100.0	100.0	100.00
31-3-1966	100.0	100.0	100.0
30-6-1966	99.9	101.5	100.2
30-9-1966	100.2	101.9	100.8
31-12-1966	96.6	103.3	99.1
31-3-1967	96.5	103.1	98.9
30-6-1967	97.3	103.5	99.6
30-9-1967	97.6	104.2	100.0

Note: 1. Public sector has been completely covered. In the private sector coverage is restricted to plantations engaging 25 or more workers and establishments engaging 10 or more workers in the non-agricultural sector. Coverage in construction activities is not complete.

2. Source—Directorate of National Employment Services.

11.10 Two studies—one on Medical and Public Health personnel and the other on Engineering personnel—conducted by the Bureau of Economics and Statistics give a picture of the employment position among Engineering and Medical personnel. These studies are subject to the following limitations.

- (a) The effect of migration has been totally ignored and
- (b) As regards Engineering personnel, ratios relating to Employment of Engineers to investment made, worked out for all India have been adopted for Kerala also.

11.11 The estimated number of Engineering Graduates (including post-graduates and above), Diploma holders and craftsmen employed at the end of the Third Five Year Plan period and the estimated unemployment during the period 1965-66 and 1970-71 is as given below:

<i>Category of personnel</i>	<i>Estimated No. of persons employed at the end of the Third Plan 1965-66</i>	<i>Estimated No. of unemployed during 1965-66</i>	<i>Estimated No. of surplus persons unemployed during 1970-71</i>
(1)	(2)	(3)	(4)
1. Engineering graduates (including post-graduates and above)	2200	1350	4150
2. Diploma holders	4000	5000	12400
3. Craftsman	13400	16000	35800

The above table shows that there is acute unemployment even among technical personnel like Engineers.

11.12 With regard to Medical and Public Health personnel, the estimated number of persons employed at the end of the year 1965-66 is given below:

<i>Category of personal</i>	<i>Estimated No. of qualified persons employed at the end of 1965-66</i>
1. Doctors (Modern Medicine)	2600
2. Dental Surgeons	100
3. General Nurses	1800
4. Auxiliary Nurse/Midwives	2000
5. Pharmacists	1100
6. Laboratory Technicians	200
7. Radiographers and X'ray technicians	70

In addition to the above there are about 2200 qualified Ayurvedic practitioners available in the State.

11.13 The requirement of Doctors during 1966-1971 in the public sector as furnished by the Director of Health Services and the Principals of Medical Colleges is nearly 900. As against this requirement the out-turn of Doctors by 1971 is estimated to be 1900 from all the Medical Colleges in the State. Thus nearly 1000 Doctors will have to find employment outside the public sector. Some of them may get employment in the private sector and others will seek employment outside the State. Even then there is a possibility that some doctors may be unemployed during the Fourth Plan period. During this period a number of qualified Ayurvedic practitioners also will come out from the 3 Ayurveda Colleges in the State. Thus even among the Medical personnel, there may be unemployment during the Fourth Plan period.

CHAPTER XII

PRICES AND COST OF LIVING

The year 1967 witnessed a further deterioration of the price situation in the State. Prices of almost all food articles and other basic consumer goods have moved up resulting in a further increase in the cost of living index by 56 points for the State. During the year the wholesale price index of agricultural commodities for the State registered an increase of 23 points.

The experience of the past decade of planning in India has been one of rising prices. The general index of wholesale prices (All India—base 52-53=100) moved up from 107.2 in April 1957 to 214.9 in November 1967 which means a rise in the price level at an average annual rate of 10%. It is also noted that the five years of the III Plan period witnessed on the whole, an increase of 32% in the wholesale price index for all commodities. A large proportion of this price rise was caused by the increase in prices of food articles (41%). During the period from January to November 1967 the All India wholesale price index recorded an increase of 8% and consumer price index 10%.

The casual factors in the price increase are numerous. Shortages in agricultural production especially of food grains and the built in weaknesses of the distribution system were the basic factors on the supply side. The rising demand coupled with the stagnant or declining production naturally led to rising prices. Deficit financing and unplanned credit creation were also responsible for the price increases. The increase in Government expenditure had also its impact on the price level.

Consumer Price Index Numbers:

12.3 The average working class consumer Price index number for the State which stood at 673 during 1966 moved upto 729 during 1967 exhibiting a rise of 56 points. The increase was accounted for mainly by the commodities included in the food articles group where the order of increase was 53 points. The average consumer price index numbers for the State for the last seven years are furnished below (See also Appendix 12.1).

**Average Working Class Consumer Price Indices
for Kerala**

<i>Year</i>	<i>Average Index</i> ^J
1961	478
1962	484
1963	501
1964	560
1965-	614
1966	673
1967	729

(J Average of the 12 Centres excluding Kozhikode)

12.4 From 478 in 1961, the index has risen to 729 by 1967 thereby registering an increase of about 53%. Average annual rate of increase worked out to 9%.

12.5 Except for an increase of 15 points during February, 1967 the average index for the State maintained more or less a steady trend till April 1967. A hardening tendency was noted during the next three months. From 707 in April, the index moved upto 743 by July after which it fluctuated within narrow limits during August and September.

The rise was mainly due to the enhanced prices of rice, pulses, coconut oil and coconut. The index continued its upward movement the reached the maximum value viz., 758, during November 1967 as against 693 during the corresponding period of the previous year (vide Table 12.2 in the Appendix). From the middle of the year the State Government had to cut down the ration supply of rice by 50%, due to abnormal fall in the arrival of rice from outside the State, which resulted in skyrocketing of the open market price of rice. Pulses maintained higher levels mainly due to the restrictions imposed on the inter-state movement of the community.

12.6 During the year under review the All India working class consumer Price Index displayed a continuous upward movement registering an increase of 10% between January—October 1967 as is evident from the table given below. The index which stood at 192 in October 1966 has moved upto 217 by October 1967 recording a rise of 13%. This was mainly due to the increase in the prices of articles in the food group. Between 1961 and 1967 the index rose by 64% indicating an average rate of 11%.

**Average working class Consumer Price Index
Numbers for India**

(Base 1949=100)

<i>Year</i>	<i>Average Index</i>
1961	126
1962	130
1963	134
1964	153
1965	166
1966	184
1967 (Upto October)	207

The index numbers for all India and some selected towns are given in table 12.3 in the appendix.

Wholesale Price Index for Agricultural Commodities:

12.7 The wholesale price index of agricultural commodities for the state as it stood during December 1966 and 1967 is given below. The index for all crops which stood at 176 during December 1966 moved upto 199 points (13%) indicating a steady increase in the general price level. Among the food crops molasses registered an increase of 63% due to high demand and disruption in the arrival from outside the State.

Wholesale Price Index of Agricultural Commodities (Kerala)

(Base 1952-53=100)

<i>Sl. No.</i>	<i>Items</i>	<i>1967 December</i>	<i>1967 December</i>	<i>Percentage variation</i>
(1)	(2)	(3)	(4)	(5)
1	Rice	151	156	+3.3
2	Molasses	184	299	+62.5
3	Condiments & Spices	151	148	-2.0
4	Fruits & Vegetables	176	199	+13.1
5	Food crops	157	166	+5.7
6.	Oil seeds	250	316	+26.4
7	Plantation Crops	122	117	-4.1
8	Non-food Crops	211	256	+21.3
9	ALL CROPS	176	199	+13.1

The fair price of rice registered only slight improvement. The index for fruits and vegetables had firmed up by 13%. In contrast the indices of condiments and spices declined moderately on account of the downward trend shown by pepper, arecanut and cardamom. Among the non-food crops the index for oil seeds reflected perceptible gain (26%) over the previous year, which was the result

of the high price of coconut. Plantation crops turned easy (—4%) under the impact of the general industrial recession in the country.

12.8 The average wholesale price index of agricultural commodities for the State for the last few years is given in Table 12.4 in the appendix. The general index which stood at 127 during 1961 advanced steadily and reached the level of 188 during 1967. Comparatively sharper had been the increase registered by the non-food crops which moved from 132 in 1961 to 226 in 1967. During the same period the indices of food crops, where the open market price of rice has not been taken into account, moved up from 122 to 167 points.

12.9 Table 12.5 in the appendix shows the all India index numbers of wholesale prices from 1961 onwards. Though a close comparison between the all India and State Indices has its limitation, arising from the difference in the combination of the commodities covered, the identity of the trend, manifests in both, has to be taken note of. Due to the fact that the all India index for food crops reflected the open market price of cereals also, the index moved up more sharply.

Retail prices of essential commodities:

12.10 In Table 12.6 (vide appendix) is given a comparison of the retail prices of some important essential commodities of daily use as prevailed in December 1966 and 1967.

Rice

12.11. The food position in the State remained difficult during the year under review particularly in respect of rice.

The price of rice supplied through Fair Price Shops underwent an upward revision with effect from 15-12-1966 as the issue price was revised by the Government of India. However, the increase in price to the tune of 11 Ps./Kg. in the issue price of coarse rice has not actually been passed on to the consumers, instead the burden is being met by the State Government in full. The fair price of coarse rice ruled steady at this level till 31-12-1967. Upward revision of prices were effected in respect of medium, fine and superfine qualities of rice on 16-7-1967 and the revised rates were as follows:—

With effect from 16-7-1967

Item	Previous (Ps.)	Current (Ps.)
Rice medium	91	92
Fine	101	104
Super fine II	107	109
Super fine I	117	

12.12 Another important feature which requires special mention *was* the reduction in the quantum of supply of rice through Fair Price Shops, as a result of the disruption and reduction in the supply of rice by the Central Government. During the weeks ending 27-5-1967 and 3-6-1967 only 50% of the ration was distributed through fair price shops. Subsequently this was restored to 75% till 8-7-1967. Thereafter only 50% of the ration viz: 3 oz. per adult is being distributed which led to the shooting up of prices of rice in the open market.

12.13 During January 1967 the open market price of rice was Rs. 1.50/Kg. which was about 9% higher than that prevalent during the corresponding period of the previous year. The prices continued to rise till August 1967. The rates prevalent during July and August 1967 were higher than those during the corresponding periods of the previous year by 37% and 42%. At Trivandrum the prices which stood at Rs. 2.16 during the beginning of July rose to Rs. 3.00/Kg. by the 3rd week registering an increase of 43%. The corresponding percentage increases in respect of Quilon, Ernakulam and Kozhikode were 63, 63 and 80 respectively. By the end of August 1967 the prices declined and this easy trend is attributed to the harvest season and this trend continued till November 1967. Compared to the levels in December 1966 the closing rates were higher by 45%.

Other food articles:

12.14 Pulses in general hardened consequent on the imposition of inter-state movement restrictions by the producing states. Prices moved to the peak level by the middle of the year and showed a tendency to ease by the end of the year. The prices of corriander, chillies and onions declined to the order of 23%, 55% and 59% because of the mounting pressure of arrivals. In contrast tamarind prices went by 115% owing to tight supply position. Scarcity of sugar and the resultant increase in the demand boosted the prices of jaggery by 65%. Coconut oil had a gain of 32% because of firm support from terminal markets. Coconut prices moved up in sympathy. Tapioca recorded an increase of 40% naturally due to the scarcity of rice. Coffee gained moderately. Prices of milk (cows) hardened by 14% and firewood by 37% during the year 1967.

Parity Index:

12.15 The parity index (i.e. the percentage ratio of prices received to prices paid by the farmers) is an indicator of the farmer's terms of trade. In other words, it is a parameter of the extent to which rising prices for their products benefit agricultural classes. Thus the farmer's economic position at any point of time could be assessed by the differential rates of rise in the indices of prices received and paid by farmers. In short, the index is a positive and specific

indicator of the changing price situations faced by the farmers with respect to the prices of the produce they sell and the prices of those commodities they purchase.

12.16 The parity index for 1967 was 103 as against 101 in 1966. Thus the farmer's terms of trade oscillated to his advantage in 1967. The subjoined table shows the parity indices for the past few years.

Index Numbers of Parity between Prices received and paid by the Farmers (Kerala)

(Base 1952-53=100)

Year	Index Numbers				
	Prices received	Domestic expenses	Cultivation cost	Prices paid	Parity
(1)	(2)	(3)	(4)	(5)	(6)
1961	109	122	123	122	90
1962	113	124	136	130	87
1963	110	127	143	135	82
1964	124	143	151	147	84
1965	175	156	171	163	107
1966	184	172	196	183	101
1967	210	186	222	203	103

12.17 The above table shows that the parity index which stood at 90 in 1961 gradually declined to 84 in 1964. This leads us to conclude that the rate of increase in respect of domestic expenditure and cultivation cost has been much faster than that of the prices of the commodities sold by farmers. In other words, the terms of trade was moving downwards, of course to the disadvantage of the farmers.

12.18 But a welcome trend was noticed from 1965 where upon the terms of trade marked an upwards swing at a rapid rate reaching the peak of 107. But in 1966 the index has declined to 101. During 1967 the index of domestic expenditure (186) and the index of cultivation cost (222) taken together which formed the index of prices paid by the farmers worked out to 203 while the index of prices received was 210 leading to a parity index of 103.

COMMODITY REVIEWS

Black Pepper:

12.48 During 1967 prices of black pepper suffered a set back at all the producing centres in the State. The extent of decline was the order of 10% at Nedumangad (Thekkon).

(Palai variety), 9% at Cochin and 8% at Kozhikode (Wynadan) compared to the 1961 prices the 1967 prices have been higher only by 3%.

Ginger:

12.20 In 1967 the quotation at Cochin and Kozhikode exhibited a slight improvement viz. 3% and 5% respectively over 1966, even though there was a mild setback at Alleppey (-1%). Prices reached the peak level during the period from May to November 1967 on account of increased demand from abroad. Compared to the peak price-level in 1965, the price during 1967 was much lower on the average.

Lemongrass Oil:

12.21 The upward movement of lemongrass oil witnessed in 1966 was maintained in 1967 also. Compared to the position in 1966, the 1967 prices increased by 27% at Cochin, 24% at Alwaye and 16% at Kozhikode. Due to fall in production market arrival of the commodity has thinned down. The average price in 1967 was lower by about 5% compared to the peak price in 1961.

Cardamom:

12.22 Cardamom which was languishing for some years gained strength in 1965 and maintained the position in the subsequent year as well. This was the result of poor crops in India which holds a virtual monopoly of the commodity.

Rubber:

12.23 The year 1967 witnessed a steady fall in the prices of natural rubber and it posed a serious situation for the rubber growers in Kerala. Compared to the position in 1966 the rubber prices have declined by 32% at Punalur and Kottayam and 29% at Kozhikode. The present decline in the prices of natural rubber has been due to:

1. the untimely import of natural rubber during the peak period of production in the country
2. the decline in the off-take of rubber by big manufactures
3. the higher quantity of imports than what was needed
4. the increase in stock of natural rubber with dealers and estates as a result of increased production during the year.

Coir:

12.24 During 1967 the Arattupuzha variety of coir registered an increase of about 18% at Alleppey. At Cochin the Parur thin variety

of coir yarn showed a rise of 11% while at Kozhikode, Beypore variety improved by 4% during the period.

Tea

12.25 Tea is foremost among the export items of Kerala and the second most important cash crop of the State in terms of net value contributed. Production of tea has increased remarkably during the last two years. But India's tea exports have been declining .

12.26 During 1967 the average wholesale price of tea at Mattancherry was lower by about 9% compared to the average price for 1966. During the period from January to June 1967 the prices of tea stayed steady at the low level of Rs. 4.08 per Kg. From the month of July onwards a gradual upward movement was noticed in the price level reaching the quotation of Rs. 5.00 per Kg. in December 1967.

Coffee

12.27 During 1967, the price of coffee has shown a downward trend. The quotation which stood at the high level of Rs. 6.05 per Kg. at Kozhikode in January 1967 progressively declined at Rs. 5.40 per Kg. in June 1967 and receded further to Rs. 5.00 per Kg. in December 1967 showed a modest rise of 1% over the 1966 prices.

of coir yarn showed a rise of 11% while at Kozhikode, Bey. variety improved by 4% during the period.

Tea

12.25 Tea is foremost among the export items of Kerala and the second most important cash crop of the State in terms of net value contributed. Production of tea has increased remarkably during the last two years. But India's tea exports have been declining .

12.26 During 1967 the average wholesale price of tea at Mattancherry was lower by about 9% compared to the average price for 1966. During the period from January to June 1967 the prices of tea stayed steady at the low level of Rs. 4.08 per Kg. From the month of July onwards a gradual upward movement was noticed in the price level reaching the quotation of Rs. 5.00 per Kg. in December 1967.

Coffee

12.27 During 1967, the price of coffee has shown a downward trend. The quotation which stood at the high level of Rs. 6.05 per Kg. at Kozhikode in January 1967 progressively declined at Rs. 5.40 per Kg. in June 1967 and receded further to Rs. 5.00 per Kg. in December 1967 showed a modest rise of 1% over the 1966 prices.

APPENDIX

Tables

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APPENDIX—1.1

Charges in the Index Number of Industrial Production 1965-and 1966

(Base: 1956—100)

<i>Industry</i>	1965	1966	% change of (2) over (1) & (3)
(1)	2	3	4
General Index ..	136.9	191.6	+2.5
Cotton Textiles ..	123.3	119.9	-2.8
jute manufactures	125.7	105.3	-20.4
Cement ..	211.2	220.7	+9.5
Finished steel ..	332.4	327.9	-4.5
Paper and paper products ..	255.4	281.7	+26.3
Coal ..	173.4	176.0	+2.6
Rubber products ..	218.0	218.0	00
Electricity ..	326.5	355.3	+8.8
Automobiles ..	225.9	220.5	-2.4

APPENDIX—1.2

(i) Index Number of Wholesale Prices

(Base 1952-53=100)

<i>Last week of</i>	<i>Food articles</i>	<i>Liquor and tobacco</i>	<i>Fuel, Power, light and lubricants</i>	<i>Manufac- tures</i>	<i>All commo- dities</i>
(1)	(2)	(3)	(4)	(5)	(6)
1962-63	123.5	117.0	203.6	129	127.4
1964-65	153.7	138.4	201.56		151.0
1965-66	175.3	127.5	737.46	3	174.0
1966-67	217.6	127	349.26	5	202.7
			4392.35		

(ii) **Working Class Consumer Price Index**

(Base 1949=100)

<i>Monthly average or months</i>		<i>All items</i>	<i>Food</i>
Financial Year			
1955-56	..	96	94
1956-57	..	107	108
1957-58	..	112	111
1958-59	..	118	121
1959-60	..	123	126
1960-61	..	124	125
1961-62	..	127	126
1962-63	..	131	131
1963-64	..	137	138
1964-65	..	157	162
1965-66	..	169	174

APPENDIX—1.3

Inflow of foreign Investments into the Private Sector during 1956-62

(Rupees in Crores)

	1956	1957	1958	1959	1960	1961	1962
A. Private Sources (net inflow)	23.8	20.8	2.5	10.2	51.7	28.1	29.7
1. Gross inflow	30.2	26.8	28.1	25.7	63.2	35.6	38.7
(i) Retained earnings	19.2	9.5	9.1	14.6	14.1	15.8	7.8
(ii) Cash inflow	3.1	5.8	4.8	3.3	6.2	4.0	5.0
(iii) Non-cash inflow	8.5	11.4	14.2	7.8	43.0	15.8	25.8
2. Outflow	7.0	6.0	25.5	15.5	11.5	7.5	9.0
B. Official Sources (net inflow)	12.1	32.9	26.2	10.0	(—)1.4	16.8	10.7
(i) Gross inflow	12.1	32.9	26.4	12.6	5.2	25.1	22.8
(ii) Outflow	—	..	0.2	2.6	6.6	8.3	12.1
Gross inflow into the private sector	42.9	59.7	54.5	38.3	68.4	60.7	61.5
Outflow	7.0	6.0	25.7	18.1	18.1	15.8	21.1
Net inflow into the private sector	35.9	53.7	28.7	20.2	30.3	44.9	40.4
Total	4392.35						
	737.46						
	201.56						
	208.07						
	5.49						

• N.B. — ... include foreign investment in banking and insurance companies.

2. The ... has been computed, wherever possible, by eliminating valuation changes.

Source : Reserve Bank of India Bulletin (April 1966, P-264).

APPENDIX—1.4

External Assistance Received by India

Authorisation and Utilisation

(In Millions of U. S. Dollars)

	Authorised upto March 1967			Utilised upto March 1967		
	Loan	Grants	PL.480 etc. Total	Loan	Grants	PL.480 etc. Total
	1890	..	.. 1890 (13.2)	1433	..	.. 1433 (13.1)
. A.	3039	359	3880	2502	344	3426
U. S. S. R.	1362	10	.. 1372 (9.6)	641	10	.. 651 (6.0)
West Germany	989	5	.. 994 (6.9)	798	5	.. 803 (7.3)
United Kingdom	865	4	.. 869 (6.1)	735	3	.. 738 (6.8)
Japan	391	..	.. 391 (2.7)	259	..	.. 259 (2.4)
Others	1044	518	.. 1562 (10.8)	324	434	.. 758 (6.9)
Total	9580	896	3880 14356 (100.0)	6692	796	3426 10914 (100.0)

Note:—Figures in brackets are in percentage to the Total.

Source : Reserve Bank of India, Report on Currency and Finance 1966-67.

APPENDIX—1.5

Aggregate External Assistance Received by India
(In Million s of U.S. Dollars)

	<i>Loans</i>	<i>Grants</i>	<i>PL. 480/665 aid and Third country curr- ency assistance</i>	<i>Total</i>
<i>Authorisation</i>				
1. Upto the end of the First Plan	477	290	36	803
2. During Second Plan	2691	254	2374	5319
3. During Third Plan	4937	269	946	6152
4. During 1966-67	1475	83	524	2082
Total	9580	896	3880	14356
<i>Utilisation</i>				
1. Upto the end of the First Plan	263	147	11	423
2. During Second Plan	1522	337	1144	3003
3. During 1966-67	897	97	480	1474
Total	6692	796	3416	10914

APPENDIX—2.1

**Density of population and percentge variation in the various
States of India**

<i>State</i>	<i>Population in 1961 in lakhs</i>	<i>Density per Sq. Km.</i>	<i>Percentage increase 1951-61</i>
Andhra Pradesh	359.83	131	15.65
Assam	118.73	97	34.45
Bihar	464.56	268	19.78
Gujarat	206.33	112	26.88
Jammu and Kashmir	35.61	26	9.44
Kerala	169.04	435	24.76
Madhya Pradesh	323.72	74	24.17
Madras	336.87	259	11.85
Maharashtra	395.54	129	23.60
Mysore	235.87	123	21.57
Orissa	175.49	113	19.82
Punjab	203.07	166	25.86
Rajasthan	201.56	59	26.20
Uttar Pradesh	737.46	250	16.66
West Bengal	349.26	394	32.79
India	4392.35	198	21.50

APPENDIX—2.2

Density of population in the Districts of Kerala

<i>District</i>	<i>Population in 1961 (lakhs)</i>	<i>Density per Sq.Km.</i>
Trivandrum	.. 17.45	798
Quilon	.. 19.41	410
Aleppey	.. 18.11	988
Kottayam	.. 17.33	273
Ernakulam	.. 18.60	557
Trichur	.. 16.40	557
Palghat	.. 17.77	346
Kozhikode	.. 26.17	393
Cannanore	.. 17.80	314
State	.. 169.04	435

APPENDIX—2.3

Estimates of State Domestic Product (Kerala) at factor cost by industry origin
(at 1960-61 prices)

(Rupees in Crores)

Year	Agriculture	Mining & Industries	Services	Net domestic product (State income)	Per capita income		
					Rs.	Index	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1950-51	182.18	54.05	97.96	334.19	248.95	100.0	94.4
1955-56	214.81	60.74	119.74	395.29	263.63	105.9	100.0
1960-61	240.99	68.30	152.86	462.16	275.96	110.9	104.7
1961-62	237.49	68.98	161.99	468.46	273.58	109.9	103.8
1962-63	243.39	70.35	172.69	486.43	277.86	111.6	105.4
1963-64	255.18	71.63	180.92	507.72	283.67	114.0	107.6
1964-65	263.79	75.80	192.31	531.89	290.68	116.8	110.2
1965-66	258.63	78.21	203.70	540.54	288.95	116.1	109.6

50-51 as base 55-56 as base

APPENDIX—2.4

Estimates of State domestic product (Kerala) at factor cost by industry origin
(at current prices)

Year	Agriculture	Mining & industries	Services	Net domestic product (State income)		Per capita income
				Rupees	Index 55-56 as base	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1955-56	161.17	58.15	102.68	322.00	214.75	100.0
1960-61	240.99	68.30	152.86	462.16	275.96	128.5
1961-62	253.89	75.16	165.16	494.21	288.62	134.4
1962-63	259.82	80.33	179.85	520.00	297.04	138.3
1963-64	284.50	83.48	188.94	556.93	311.17	144.9
1964-65	372.16	93.34	210.76	676.26	369.58	172.1

APPENDIX—2.5

Conventional estimates of domestic product at factor cost by Industry origin (All India)
(at 1948-49 prices)

(Rupees Abja)

Year	Agriculture	Mining & Industries	Services	Net domestic product	Net national product (national income)	Per capita income	
						Rupees	Index
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1950-51	43.4	14.8	30.5	88.7	88.5	247.5	100.0
1955-56	50.2	17.6	37.0	104.8	104.8	267.8	108.2
1960-61	59.0	21.1	47.7	127.8	127.3	293.3	118.5
1961-62	59.1	22.1	50.1	131.1	130.6	294.0	118.8
1962-63	57.9	23.0	53.0	133.9	133.1	291.9	117.9
1963-64	59.7	24.4	56.5	140.6	139.7	299.2	120.9
1964-65	65.1	25.3	60.7	151.1	150.0	313.7	126.7
1965-66	57.2	26.6	64.0	147.8	146.6	299.4	121.0

Abja—100 Crores.

NOTE:—The estimates presented are at 48-49 prices and are therefore not comparable in absolute terms with the Kerala estimates at constant (1960-61) prices presented in table 1.3.

APPENDIX—2.6

Conventional estimates of domestic product (all India) at factor cost by industry origin
(At current prices)

(Rupees Abjasa)

Year	(2)	Agriculture (3)	Mining & Industries (4)	Services (5)	Net domestic product (national income) (6)	Per capita income		
						Rupees (7)	50-51 as base 55-56 as base (8) (9)	
1950-51	48.9	15.3	31.3	95.5	95.3	266.5	100.0	104.5
1955-56	45.2	18.5	36.1	99.8	99.8	255.0	95.7	100.0
1960-61	68.9	26.0	47.0	141.9	141.4	325.8	122.3	127.8
1961-62	69.6	28.8	50.3	148.7	148.0	337.7	125.0	130.7
1962-63	70.0	30.8	54.0	154.8	154.0	368.6	126.7	132.4
1963-64	81.7	33.3	58.0	173.0	172.1	427.3	138.3	144.5
1964-65	105.3	36.7	63.4	205.4	204.3	415.3	160.0	167.6

Abja—100 Crores.

APPENDIX—2.7

Indices of net domestic/National/Per capita product by Industry origin at current prices

(Base 1955-56=100)

Sector	Region	Period					
		1955-56	1960-61	1961-62	1963-63	1963-64	1964-65
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Agriculture	Kerala	100.0	149.5	157.5	161.2	176.5	230.9
	India*	100.0	152.4	154.0	154.9	180.8	233.0
2. Mining and Industries	Kerala	100.0	117.5	129.3	138.2	143.6	160.5
	India	100.0	140.5	155.7	166.5	180.0	198.4
3. Agriculture, Mining and Industries combined	Kerala	100.0	141.0	150.0	155.1	167.8	212.3
	India	100.0	149.0	154.5	158.2	180.5	222.9
4. Services	Kerala	100.0	148.9	160.8	175.2	184.0	205.3
	India	100.0	130.2	139.3	149.6	160.7	175.6
5. Net domestic products	Kerala	100.0	143.5	153.5	161.5	173.5	210.0
	India	100.0	142.2	149.0	155.1	173.4	205.8
6. Net National Product	India	100.0	141.7	148.3	154.3	172.4	203.8
7. Per capita Income	Kerala	100.0	128.5	134.4	138.3	144.9	172.1
	India	100.0	127.8	130.7	132.4	144.5	167.6

* Conventional series

APPENDIX—2.8

Indices of Net Domestic/National/Per capita Product by Industry Origin at constant prices
(Base 1950-51—100)

Sector	Region	Period									
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66		
1. Agriculture	Kerala*	100.0	117.9	132.3	130.4	133.6	140.1	144.8	142.0		
	India**	100.0	115.7	135.9	136.2	133.4	137.6	150.0	131.8		
2. Mining and Industries	Kerala	100.0	112.4	126.4	127.6	130.2	132.5	140.2	144.7		
	India	100.0	118.9	142.5	149.3	155.4	164.9	171.0	179.7		
3. Agriculture, Mining & Industries combined	Kerala	100.0	116.6	130.9	129.7	132.8	138.3	143.8	142.6		
	India	100.0	116.5	137.6	139.5	139.0	144.5	155.3	144.0		
4. Services	Kerala	100.0	122.2	156.1	165.4	176.3	184.7	196.3	208.0		
	India	100.0	121.3	156.4	164.3	173.8	185.3	199.0	209.8		
5. Net domestic product	Kerala	100.0	118.3	138.3	140.2	145.6	151.9	159.2	161.8		
	India	100.0	118.2	144.1	148.0	151.0	158.5	170.4	166.6		
6. Net National Product	India	100.0	118.4	143.8	147.6	150.4	157.9	169.5	165.7		
7. Per capita income	Kerala	100.0	105.9	110.9	109.9	111.6	114.0	116.8	116.1		
	India	100.0	108.2	118.5	118.8	117.9	120.9	126.7	121.0		

* At 1960-61 prices

** At 1948-49 prices conventional series.

APPENDIX—2.9

Net Domestic product by Industry Origin At constant prices—Percentage Distribution

Sector	Region	Period								
		1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1. Agriculture	Kerala*	54.5	54.3	52.1	50.7	50.0	50.3	49.6	47.8	
	India**	48.9	47.9	46.2	45.0	43.2	42.5	43.1	38.7	
2. Mining & Industries	Kerala	16.2	15.4	14.8	14.7	14.5	14.1	14.2	14.5	
	India	16.7	16.8	16.5	16.8	17.2	17.3	16.7	18.0	
3. Agriculture, Mining & Industries combined	Kerala	70.7	69.7	66.9	65.4	64.5	64.4	63.8	62.3	
	India	65.6	64.7	62.7	61.8	60.4	59.8	59.8	56.7	
4. Services	Kerala	29.3	30.3	33.1	34.6	35.5	35.6	36.2	37.7	
	India	34.4	35.3	37.3	38.2	39.6	40.2	40.2	43.3	
5. Net domestic product	Kerala	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	India	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
6. Net National product	India	99.8	100.0	99.6	99.5	99.4	99.4	99.3	99.2	

* At 1960-61 Prices.

** At 1948-49 Prices Conventional series.

APPENDIX—2.10

Net Domestic Product by Industry Origin at Current prices
Percentage Distribution

Sector	Region	Period					
		1955-56	1960-61	1961-62	1962-63	1963-64	1964-65
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Agriculture	Kerala	50.0	52.1	51.4	50.0	51.1	55.0
	India*	45.3	48.6	46.8	45.2	47.2	51.3
2. Mining and Industries	Kerala	18.1	14.8	15.2	15.4	15.0	13.8
	India	18.5	18.3	19.4	19.9	19.3	17.9
3. Agriculture, Mining and Industries combined	Kerala	68.1	66.9	66.6	65.4	66.1	68.8
	India	63.8	66.9	66.2	65.1	66.5	69.2
4. Services	Kerala	31.9	33.1	33.4	34.6	33.9	31.2
	India	36.2	33.1	33.8	34.9	33.5	30.8
5. Net domestic product	Kerala	100.0	100.0	100.0	100.0	100.0	100.0
	India	100.0	100.0	100.0	100.0	100.0	100.0
6. Net National product	India	100.0	99.6	99.5	99.5	99.5	99.5

* Conventional series.

TABLE—3.1

Average monthly rainfall in Kerala 1966-67

(Millimetre)

District	July 1966	Aug. 1966	Sep. 1966	Oct. 1966	Nov. 1966	Dec. 1966	Jan. 1967	Feb. 1967	March 1967	April 1967	May 1967	June 1967	Total 1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	213.9	103.5	441.6	317.4	106.6	60.1	24.0	0.1	62.4	63.2	215.6	461.1	2123.5
Quilon	311.9	197.5	275.2	431.6	196.3	71.3	22.6	..	58.3	99.5	276.5	536.5	2477.2
Alleppey	370.6	165.5	435.0	387.1	383.2	31.6	12.0	..	13.8	109.4	371.4	642.8	2922.4
Kottayam	479.8	165.7	246.8	356.0	365.3	91.6	23.4	0.4	41.7	100.8	250.8	498.1	2628.4
Ernakulam	749.4	178.5	364.0	440.0	332.4	102.0	57.2	..	15.4	82.8	478.0	674.7	3474.4
Trichur	746.1	191.7	329.0	557.2	218.1	56.0	1.6	..	6.9	27.6	333.8	497.2	2965.2
Palghat	557.2	130.7	189.7	364.8	187.1	20.4	10.7	..	11.7	40.9	139.3	342.1	1994.6
Kozhikode	661.5	216.9	277.6	469.5	215.0	33.5	..	..	21.3	62.9	218.0	598.2	2774.4
Cannanore	752.1	320.2	219.2	345.9	192.5	8.1	3.2	..	1.4	39.0	178.7	714.8	2775.1
State average	538.1	185.6	308.7	407.7	250.1	52.7	17.2	0.1	25.9	69.6	274.5	551.7	2681.9

TABLE—3.2
Total area and classification of area in each District of Kerala during the year ending 30th June 1967
(Area in hectares)

District	Total geographical area according to village papers	Classification of area										Total cropped area
		Forest	Land put to non-agricultural uses	Barren and uncultivable land	Permanent pastures and other grazing land	Land under miscellaneous tree crops not included in net area sown	Cultivable waste	Fallow land other than current fallow	Current fallow	Net area sown	Area sown more than once	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	216096	44559	15662	707	550	216	761	741	597	152303	63247	215550
Quilon	469051	210857	14979	11800	1300	2000	2560	2308	1384	221863	75319	297182
Alleppey	186790	513	11803	1102	250	6920	1789	1517	600	162296	63844	226140
Kottayam	626225	252964	16072	17591	3500	11355	18380	1050	1815	303498	47359	350857
Ernakulam	317428	55212	21299	5590	2000	3994	8646	2530	2255	215902	45719	261621
Trichur	294262	132376	15892	2667	500	1160	2710	437	1860	136660	77390	214050
Palghat	510424	99663	61324	22362	5000	30995	19631	3966	7798	259685	86054	345739
Kozhikode	661586	193756	32523	15045	2700	29012	25026	6876	5044	351604	40295	391899
Cannanore	576661	65932	45767	23573	12000	96190	26148	14540	5093	287418	31515	318933
STATE	3858523	1055832	235321	100437	27800	181842	105651	33965	26446	2091229	530742	2621971

TABLE—3.3
Area and production of the various crops in Kerala

Sl.No.	Crops	1965-66		1966-67		Average Yield (Kg./Hect.)	Production (Tonnes)	Average Yield (Kg./Hect.)	Production (Tonnes)
		(1)	(2)	(3)	(4)					(5)	(6)	(7)	(8)
FOOD CROPS									
1	Rice	802329	✓	997489	✓	1243	1084062	1356	1084062
2	Pulses	43312	✓	16901	✓	390	17071	392	17071
3	Sugarcane (gur)	9193	✓	40948	✓	4454	54902	5618	54902
4	Pepper	99695	✓	21685	✓	218	21406	215	21406
5	Ginger	11847	✓	11190	✓	945	11054	937	11054
6	Turmeric	4464	✓	3766	✓	844	3747	843	3747
7	Cardamom	28684	✓	1606	✓	56	1606	34	1606
8	Betel nuts	64478	✓	9681*	✓	150144	10683*	149976	10683*
9	Bananas and other Plantain	47779	✓	361122	✓	7558	344896	7565	344896
10	Cashewnut	87366	✓	98025	✓	1122	101607	1122	101607
11	Tapioca	229684	✓	3095658	✓	13478	3409668	13937	3409668
12	Other food crops	206495	✓	..	✓	..	..	..	..
	Total food crops	1635326	✓	..	✓	..	..	..	..
NON-FOOD CROPS									
1	Graoundnut	15215	✓	25220	✓	1658	23601	1717	23601
2	Sesamum	11950	✓	2365	✓	198	2400	199	2400
3	Coconut	586313	✓	3293*	✓	5616	3425	561*	3425
4	Cotton	7160	✓	6933**	✓	174	6458**	..	6458**
5	Tobacco	705	✓	911	✓	1293	920	..	920
6	Tea	39470	✓	39154	✓	992	44130	..	44130
7	Coffee	23602	✓	9878	✓	418	10513	..	10513
8	Rubber	149634	✓	46593	✓	314	504*	..	504*
	Other non food crops	81969	✓	..	✓	..	54886	..	54886
	Total non food crops	916018	✓	..	✓	..	945149	..	945149
	Total cropped area	2551344	✓	..	✓	..	2621971	..	2621971

* Million nuts
** Bales of 180 kg. each.

TABLE—3.4

Statement showing the Offtake of Rice and Wheat Month-wise for 30th June 1967
years 1965, 1966 and 1967
(Area in hectares)

Month	Offtake rice in Tonnes			Offtake wheat in Tonnes		Area sown in 1966	Total cropped area
	1965	1966	1967	1965	1966		
January	65243	60950	72555	21918	31337	17510	
February	64808	55799	62394	28165	21412	13289	
March	72378	66816	67409	28542	20816	14941	
April	71727	71833	66135	25346	18881	16557	
May	76024	75612	55008	30136	21886	26012	
June	75364	74790	53578	28507	27965	38526	
July	91492	78607	44290	26284	32816	51859	
August	96159	78750	39522	25775	33477	60702	
September	78877	73153	36719	22168	26313	50360	
October	70274	72937	37109	22449	23376	51936	
November	69049	71986	36879	24025	20829	54182	
December	75005	67273	41496	28560	23448	58740	
Total	906400	848506	613094	311875	302556	454614	

TABLE—3.5

Out-turn of Timber and Firewood

Sl. No.	Item	Unit	1960-61	1964-65	1965-66	1966-67
1	2	3	4	5	6	7
1	A. Round logs	C.M.	223158	284662	437677	504442
	(i) Teak	C.M.	33587	30346	27875	36549
	(ii) Others	C.M.	189571	254316	409802	467893
	B. Sawn & squared Timber	C.M.	151	56	3474	129
	(i) Teak	C.M.	46	43	11	8
	(ii) Others	C.M.	105	13	3463	121
2	Round poles	Nos.	252340	249581	251019	422985(CM)
3	Firewood	Tonnes	182253	137570	163255	257160
4	Sandal wood	Kgs.	7380	57137	76427	116171
5	Outer slabs	Nos.	112	102	..	435
6	Teak Kappukal	Nos.	..	350	..	11659
7	Ivory	Kgs.	709.9	773.1	165.4	318

TABLE—3.6

Revenue from Forests

(Rs. in lakhs)

Year	Receipts from the sale of								Refunds	Net Receipt
	Timber	Fuel	Miner produce		Other receipts	Gross receipts				
1	2	3	4	5	6	7	8			
1960-61	406.1	5.1	15.1	12.0	438.3	6.3	432.0			
1964-65	482.7	6.9	10.7	26.9	527.2	3.6	523.6			
1965-66	525.2	7.0	12.7	29.0	573.9	3.5	570.4			
1966-67	601.1	8.3	..(*)	60.1	669.5	3.9	665.6			

(*) The receipts from miner produces during 1966-67 are accounted under "other receipts" in col. (5).

TABLE—4.1

State-Wise distribution of Rubber Holdings and Estates at the end of 1966-67

(Area in hectares,

States	Small Growers Holding		Large Growers (Estates)			Total			
	Number of Units	Area Average area of a Unit	Number of Units	Area Average area of a Unit	Number of Units	Area Average area of a Unit			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1 Kerala	80422	104756	1.30	593	56318	94.97	81015	161074	1.99
2 Madras	1208	2952	2.44	41	5130	125.12	1249	8082	6.47
3 Mysore	56	272	4.86	10	1572	157.20	66	1844	27.94
4 Andamans and others	2	24	12.00	3	236	78.67	5	260	52.00
Total	81688	108004	1.32	647	63256	97.77	82335	171260	2.08

TABLE—4.2
**Revenue from
 Receipts of Rubber in India**

Year	Receipts in Lakhs		Total area under Rubber ('000 hectares)	Percentage of Col. 2 to Col. 3.
	Timber	Fuel		
	(1)	(2)	(3)	(4)
1956-57		23.06	94.88	24
1960-61		46.56	129.91	36
1961-62		54.26	140.88	39
1962-63		58.71	146.15	40
1963-64		66.32	152.95	43
1964-65		70.19	155.33	45
1965-66		82.61	164.71	50
1966-67		93.63	171.33	55

TABLE—4.3
Consumption of Rubber in India

(in tonnes)

Year	Consumption of natural rubber	Consumption of synthetic rubber	Consumption of reclaimed rubber	Total consumption	Production of natural rubber	Gap between total consumption and production of natural rubber
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1955-56	28445	461	2647	31553	23730	7823
1960-61	48148	7397	5453	60998	25697	35301
1961-62	48410	10186	6046	64642	27446	37196
• 1962-63	53553	10723	6850	71126	32239	38887
1963-64	61155	11959	7982	81096	37487	43609
1964-65	61057	15285	9369	85711	45616	40095
1965-66	63765	21553	9774	95092	50530	44562
• 1966-67	68685	23592	10913	103190	54818	48372

TABLE—4.4

**Area under cultivation, total production and average yield per hectare of tea
in each State of India during 1964 to 1966**

Sl. No.	State	Area in Hectares			Production in '000 Kg.			Average yield per hectare in Kg.		
		1964	1965	1966*	1964	1965	1966*	1964	1965	1966*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Assam	166251	169659	172305	195726	181888	189961	1117	1072	1101
2	West Bengal	84830	85031	85648	89378	86979	85271	1054	1023	1001
3	Tripura	5288	5502	5537	2974	2646	2490	562	481	450
4	Bihar	534	476	476	55	39	65	103	82	137
5	Uttar Pradesh	2012	1972	1972	704	612	419	350	310	212
6	Punjab (Kangra)	3763	3763	3763	1070	1012	966	284	269	257
7	Himachal Pradesh	420	420	420	106	70	45	252	167	107
8	Madras	33029	33207	33709	41964	47344	48493	1271	1426	1439
9	Mysore	1789	1811	1811	1822	2218	2259	1018	1225	1247
10	Kerala	39958	39921	39615	38686	43567	44687	969	1091	1128
Total		337874	341762	345256	372485	366374	374806	1102	1072	1086

*Provisional

TABLE—4.5

Area and production of Tea according to the Sizes of Estates in Kerala during 1965-66

Sl. No.	Size of Estate (Hectares)	No. of Estates	Area in hectares	Production in Kg.	Average yield per hectare (Kg.)
(1)	(2)	(3)	(4)	(5)	(6)
1	Upto 5 hectares	2287	1395	N.A.	N.A.
2	Above 5 hectares and below 50 hectares	99	1497	440128	294
3	Above 50 hectares and below 100 hectares	30	2236	1348677	603
4	Above 100 hectares and below 200 hectares	34	4847	5384160	1111
5	Above 200 hectares and below 400 hectares	64	18310	22751572	1243
6	Above 400 hectares	22	1111	12573668	1131
	All	2536	39397	N.A.	N.A.

Note:—1. Number of estates and area in hectares relate to those on 31st March 1966.

2. Production in Kg. relate to calendar year 1965.

TABLE—5.1

Marine Fish landings in Kerala (1966-67)

Sl. No.	Species	1966-67		1965-66	
		Quantity (in '000 tonnes)	%	Quantity (in '000 tonnes)	%
(1)	(2)	(3)	(4)	(5)	(6)
1	Oil Sardine	96.9	42.6	121.7	56.4
2	Other Sardine	19.1	8.4	8.2	3.8
3	Mackerel	9.6	4.2	3.2	1.5
4	Prawns	26.1	11.5	18.3	8.5
5	Shark and Dog fish	1.8	0.8	2.7	1.3
6	Skates & rays	0.5	0.2	0.4	0.2
7	Cat fish	8.2	3.7	3.3	1.5
8	Seer fish	0.8	0.4	1.8	0.8
9	Silver Bellies	7.1	3.1	5.4	2.5
10	White Bait	2.0	0.8	2.6	1.2
11	Soles	4.4	2.0	7.1	3.3
12	Bonito or Tunny	1.7	0.7	1.6	0.7
13	Pomprets	1.0	0.4	0.9	0.4
14	Lactarius	1.4	0.6	0.8	0.4
15	Ribbon fish	4.3	1.9	0.6	0.3
16	Others	42.6	18.7	37.0	17.2
	Total	227.5	100.0	215.6	100.0

APPENDIX—6.1

**Distribution of factories and number of workers for all
industries together by State (1965)**

Sl. No.	State	Total	
		No. of factories*	No. of workers
(1)	(2)	(3)	(4)
1	Andhra Pradesh	4184	236567
2	Assam	1278	82341
3	Bihar	1856	161960
4	Gujarat	4445	402698
5	Jammu and Kashmir	179	8515
6	Kerala	1987	171452
7	Madhya Pradesh	2311	167127
8	Madras	5446	355568
9	Maharashtra	8776	845391
10	Mysore	2606	199978
11	Orissa	918	61496
12	Punjab	3857	160182
13	Rajasthan	846	66627
14	Uttar Pradesh	3159	308621
15	West Bengal	5326	851254
16	Andaman & Nicobar	15	2274
17	Delhi	1301	67455
18	Himachal Pradesh	30	2235
19	Tripura	58	1827
20	Pondicherry	107	11417
21	Goa, Daman & Diu	65	5560
22	Manipur	6	562
	All India	48754	4171107

*Coming under Census part of the survey.

Source: Annual Survey of Industries, 1965.

APPENDIX—6.2

Distribution of Working Factories in Kerala according to Employment as on 31-12-1967

Sl.No.	Name of Industries	1 to 49		50 to 99		100 to 499		500 to 999		1000 & above		State	
		A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Canning and preservation of fruits and vegetables	3	42	..	..	3	338	..	..	..	..	6	380
2	Canning and preservation of fish & other sea foods	2	28	..	..	9	290	..	..	14	1332	25	1650
3	Rice and other flour mills	4	23	4	73	6	173	93	1162	..	..	107	1431
4	Sugar	..	..	..	..	1	390	2	766	..	..	3	1156
5	Oil mills	..	..	42	290	79	574	159	1258	..	..	280	2122
6	Tea	1	10	1	97	23	820	17	804	84	4235	126	5966
7	Cashew	..	..	..	..	1	100	..	..	237	92552	238	92652
8	Starch and other food articles except beverages	4	67	2	84	17	709	..	..	12	1198	35	2058
9	Beedi and Cigar	..	..	..	..	15	368	51	1725	..	..	66	2093
10	Cotton Textiles	..	..	..	..	24	526	1	964	213	12753	238	14243
11	Knitting	1	5	2	86	8	416	..	..	..	..	11	507
12	Coir	2	31	..	..	..	..	11	881	133	5018	146	5930
13	Other textiles	2	29	..	..	..	..	1	814	1	1193	4	2036
14	Umbrellas	4	48	4	93	10	357	..	..	..	..	18	498
15	Saw mills	4	23	..	..	55	789	120	1882	66	1697	245	4391
16	Plywood	2	68	..	..	8	701	3	792	..	..	13	1561
17	Other timber industries including splints and veneers	..	..	..	..	28	857	139	3658	35	1475	202	5990
18	Paper mills	1	15	..	..	..	..	1	598	..	..	2	613
19	Paper Board, straw board and other paper products	6	135	..	..	2	187	..	..	1	1683	9	2005
20	Printing and binding	..	..	..	..	51	1103	127	2866	31	1293	209	5262
21	Rubber and Rubber products including rubber retreading	..	..	5	74	68	1634	17	660	42	1208	132	3576
22	Artificial manures	2	31	..	..	3	204	..	..	5	3953	10	4188

Sl.No.	Name of Industries	1 to 49		50 to 99		100 to 499		500 to 999		1000 & above		State	
		A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
23	Pharmaceuticals	4	80	5	223	12	478	..	..	..	..	21	781
24	Soap	1	29	..	..	3	248	3	916	..	..	7	1193
25	Other chemicals including markets	5	42	3	80	24	1053	22	564	12	1037	66	2776
26	Petroleum refineries	4	37	..	..	..	..	..	..	5	1060	9	1097
27	Bricks and Tiles	1	20	7	132	6	496	29	1552	183	11452	226	13652
28	Glass	..	..	1	50	1	310	..	..	..	..	2	360
29	Pottery China and earth-ware	2	65	1	58	5	404	..	..	..	..	8	527
30	Cement	..	..	..	..	1	399	..	..	..	..	1	399
31	Basic metal industries	8	86	7	131	3	234	3	567	11	1124	32	2142
32	Metal products except machinery and Transport equipment	6	83	12	150	19	541	44	1291	19	1078	100	3143
33	Agricultural implements	3	42	2	90	5	260	..	..	..	..	10	392
34	General and jobbing engineering	..	..	8	160	26	958	49	1714	..	..	83	2832
35	Other machinery except electrical machinery	8	106	2	94	12	299	..	..	2	2096	24	2595
36	Electrical machinery	3	54	9	199	10	614	9	567	..	..	31	1434
37	Marine Engineering Buildings and repairing	..	..	3	114	..	..	..	..	7	1041	10	1155
38	Repair of Motor vehicles	..	..	2	79	85	1786	38	865	16	1035	141	3765
39	Manufacture of Bicycles	2	32	2	70	2	102	..	..	..	..	6	204
40	Other industries not classified above	..	..	8	54	52	1327	21	548	..	..	81	1929
Total		85	1231	132	2481	677	20045	960	27414	1129	149513	2983	200684

A—Number of Factories.

B—Employment—Number of workers employed.

APPENDIX—6.3

District-wise distribution of Working Factories as on 31-12-1967

Sl. No.	Names of Industries	Trivandrum		Quilon		Alleppey		Kottayam		Ernakulam	
		A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Canning and preservation of fruits and vegetables	..	..	..	..	..	..	1	22	..	..
2	Canning & preservation of fish & other sea foods	..	..	1	16	4	163	..	..	14	1332
3	Rice and other flour mills	..	..	..	..	..	..	..	..	4	73
4	Sugar	..	..	..	..	..	..	..	..	..	..
5	Oil mills	22	112	19	169	2	766	12	60	38	293
6	Tea	5	194	9	327	91	727	84	4235	1	10
7	Cashew	13	3967	196	76092	6	6441	1	100	4	1427
8	Starch and other food articles except beverages	2	32	5	255	9	153	1	18	2	84
9	Beedi and Cigar	..	..	..	..	..	..	..	..	5	109
10	Cotton Textiles	8	1275	1	964	..	..	..	..	6	1529
11	Knitting	1	5	..	..	..	..	..	..	..	..
12	Coir	1	15	..	..	120	3828	1	16	13	1190
13	Other Textiles	1	9	..	..	..	..	..	..	1	814
14	Umbrellas	..	..	..	..	3	31	..	..	1	17
15	Saw mills	2	12	19	350	2	11	18	271	40	564
16	Plywood	..	..	1	103	..	..	5	370	1	21
17	Other Timber industries including splints & veneers	8	353	37	969	7	155	13	349	21	682
18	Paper mills	..	..	1	598	..	..	..	..	..	..
19	Paper Board, straw board and other paper products	..	..	..	..	2	41	2	44	..	..
20	Printing and Binding	31	1293	12	402	17	158	31	810	37	703
21	Rubber and rubber products including rubber retreading	7	304	18	423	4	248	42	1208	17	660
22	Artificial manures	..	..	..	..	..	..	3	204	5	3953
23	Pharmaceuticals	2	41	1	50	1	24	1	15	2	77

Sl. No.	Name of Industries	Trichur		Palghat		Kozhikode		Cannanore		State	
		A	B	A	B	A	B	A	B	A	B
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	Canning and preservation of fruits and vegetables	3	338	..	..	2	20	..	..	6	380
2	Canning & preservation of fish & other sea foods	1	12	..	..	5	127	..	..	25	1650
3	Rice and other flour mills	31	559	62	603	6	173	4	23	107	1431
4	Sugar	..	..	1	390	..	..	..	..	3	1156
5	Oil mills	68	531	9	78	12	72	9	80	280	2122
6	Tea	1	97	3	146	17	804	6	153	126	5966
7	Cashew	10	1993	..	..	3	1304	5	1328	238	92652
8	Starch and other food articles except beverages	1	17	..	..	12	1198	3	301	35	2058
9	Beedi and Cigar	4	116	27	960	6	143	24	765	66	2093
10	Cotton Textiles	6	2489	1	227	23	249	193	7510	238	14243
11	Knitting	1	163	..	..	2	86	7	253	11	507
12	Coir	..	..	..	..	11	881	..	..	146	5930
13	Other Textiles	1	1193	..	..	1	20	..	..	4	2036
14	Umbrellas	4	93	..	..	10	357	..	..	18	498
15	Saw Mills	48	602	18	168	66	1697	32	716	245	43914
16	Plywood	2	228	1	47	..	..	3	792	13	1561
17	Other Timber industries including splints & vencers	36	621	35	1475	27	823	18	563	202	5990
18	Paper mills	..	..	..	..	..	..	1	15	2	613
19	Paper Board, straw board and other paper products	1	30	1	20	1	1683	2	187	9	2005
20	Printing and Binding	35	576	11	384	24	777	11	159	209	5262
21	Rubber and rubber products including rubber retreading	16	277	5	74	20	267	3	115	132	3576
22	Artificial manures	..	..	..	..	2	31	..	..	10	4188
23	Pharmaceuticals	10	223	2	96	2	255	..	..	21	781

APPENDIX—6.3 (Contd.)

Sl. No.	Name of Industries	Trivandrum		Quilon		Alleppey		Kottayam		Ernakulam	
		A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
24	Soap	..	334	..	170	..	33	..	..	3	916
25	Other chemicals including matches	..	..	..	..	..	..	..	..	..	..
26	Petroleum refineries	..	..	..	..	..	..	..	..	..	..
27	Bricks and tiles	..	..	..	..	..	..	..	..	..	..
28	Glass	..	..	..	..	..	..	..	..	..	..
29	Pottery, China and Earthen ware	..	..	..	..	..	..	..	..	..	..
30	Cement	..	..	..	..	..	..	..	..	..	..
31	Basic metal industries	..	..	..	..	..	..	..	..	..	..
32	Metal products except machinery and transport equipments	..	..	..	..	..	..	..	..	..	..
33	Agricultural implements	..	..	..	..	..	..	..	..	..	..
34	General and jobbing engineering	..	..	..	..	..	..	..	..	..	..
35	Other machinery	..	..	..	..	..	..	..	..	..	..
36	Electrical machinery	..	..	..	..	..	..	..	..	..	..
37	Marine Engineering, Building and repairing	..	..	..	..	..	..	..	..	..	..
38	Repair of Motor vehicles	..	..	..	..	..	..	..	..	..	..
39	Manufacture of bicycles	..	..	..	..	..	..	..	..	..	..
40	Other industries not classified above	..	..	..	..	..	..	..	..	..	..
	Total	152	9929	424	85743	298	13426	265	9417	371	25126

A—Number of Factories.

R—Employment—Number of workers employed

Sl. No.	Name of Industries	Trichur		Palghat		Kozhikode		Cannanore		State	
		A	B	A	B	A	B	A	B	A	B
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(10)	(21)	(22)
24	Soap	1	29	..	..	3	248	..	..	7	1193
25	Other chemicals including matches	22	564	11	269	4	280	1	9	66	2776
26	Petroleum refineries	119	5092	10	624	21	4144	6	496	9	1097
27	Bricks and tiles	..	..	..	..	..	..	..	..	226	13652
28	Glass	..	..	..	..	..	..	..	..	2	360
29	Pottery, China and Earthenware	..	58	1	18	3	120	1	47	8	527
30	Cement	..	..	..	..	..	..	..	..	1	399
31	Basic metal industries	4	32	3	67	3	234	1	20	32	2142
32	Metal products except machinery and transport equipments	16	369	19	1078	3	71	3	36	100	3143
33	Agricultural implements	1	14	5	260	..	..	1	20	10	392
34	General and jobbing engineering	19	632	5	82	8	293	3	78	83	2832
35	Other machinery	8	135	5	45	2	94	1	15	24	2595
36	Electrical machinery	5	77	4	122	2	64	2	58	31	1434
37	Marine Engineering, Building and repairing	..	..	..	..	..	..	..	..	10	1155
38	Repair of Motor Vehicles	24	409	14	155	38	865	11	178	141	3765
39	Manufacture of bicycles	..	..	..	..	..	..	..	..	6	204
40	Other industries not classified above	6	112	7	357	8	114	9	146	81	1929
TOTAL		505	17681	261	7805	347	17494	360	14063	2983	200684

APPENDIX—6.4

**New Registration and cancellation of Registration
effected during the year 1967**

<i>Sl. No.</i>	<i>Name of Industries</i>	<i>No. of factories as on 31-12-1966</i>	<i>No. of factories opened during 1967</i>	<i>No. of factories removed during 1967</i>	<i>No. of factories working as on 31-12-1967</i>	<i>Remarks</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Canning and Preservation of fruits and vegetables	6	..	..	6	
2	Canning and Preservation of fish and other sea foods	23	2	..	25	
3	Rice and other flour mills	105	2	..	107	
4	Sugar	3	..	..	3	
5	Oil Mills	277	12	9	280	
6	Tea	125	1	..	126	
7	Cashew	212	26	..	238	
8	Starch and other food articles except beverages	35	..	..	35	
9	Beedi and Cigar	66	..	..	66	
10	Cotton Textiles	240	3	5	238	
11	Knitting	11	..	..	11	
12	Coir	142	5	1	146	
13	Other Textiles	3	1	..	4	
14	Umbrellas	18	..	..	18	
15	Saw Mills	239	9	3	245	
16	Ply wood	13	..	..	13	
17	Other Timber Industries including Splints and Veneers	208	..	6	202	
18	Paper Mills	2	..	..	2	
19	Paper board, straw board and other paper products	7	2	..	9	
20	Printing and Binding	206	9	6	209	
21	Rubber and Rubber products including rubber retreading	130	2	..	132	
22	Artificial manures	9	1	..	10	
23	Pharmaceuticals	20	1	..	21	
24	Soap	7	..	..	7	
25	Other chemicals including matches	58	8	..	66	
26	Petroleum refineries	9	..	..	9	
27	Bricks and tiles	224	3	1	226	
28	Glass	2	..	..	2	
29	Pottery china and earthenware	8	..	..	8	
30	Cement	1	..	..	1	
31	Basic metal industries	31	1	..	32	
32	Metal products except transport equipments	96	4	..	100	
33	Agricultural implements	10	..	..	10	
34	General and jobbing engineering	77	6	..	83	
35	Other machinery except electrical machinery	23	1	..	24	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
36	Electrical machinery	31	..	..	31	
37	Marine Engineering and bunding and repairing	10	..	..	10	
38	Repair of motor vehicles	140	4	3	141	
39	Manufacture of bicycles	6	..	..	6	
40	Other Industries not classified above	78	5	2	81	
Total		2911	108	36	2983	

APPENDIX 6.5

Earnings of Factory Employees * Earning Less than Rs. 400 per month

(In Rupees)

State/Union Territory	Total Annual Earnings (000')		Per capita daily Earnings		Percentage increase (+) or decrease (-) in per Capita Earnings in 1965 over 1964
	1965(P)	1964(P)	1965(P)	1964(P)	
(1)	(2)	(3)	(4)	(5)	(6)
Andhrapradesh	147984	141631	3.19	3.23	(-)1.2
Assam	77345	72126	4.80	3.62	(+)32.6
Bihar	365476	318604	5.94	5.28	(+)12.5
Gujarat	670558	593680	6.69	5.92	(+)13.0
Jammu & Kashmir	1499	3307	3.14	3.02	(+) 4.0
Kerala	98975	77475	3.54	3.15	(+)12.4
Madhya Pradesh	178159	134792	5.70	6.45	(-)11.6
Madras	547144	449758	6.30	5.07	(+)24.3
Maharashtra	1682615	1452571	7.29	6.52	(+)11.8
Mysore	265348	210237	5.81	5.31	(+) 9.4
Orissa	71508	22319&	5.33	3.81&	(+)39.9&
Punjab	236954	180915	5.47	4.59	(+)19.2
Rajasthan	43521	42114	4.95	4.41	(+)12.2
Uttar Pradesh	526347	433048	5.55	4.99	(+)11.2
West Bengal	1244094	1122951	5.99	4.55	(+) 9.9
Andaman & Nicobar Islands	4097	3237	5.57	4.54	(+)22.7
Delhi	128290	95993	7.18	5.83	(+)23.2
Himachal Pradesh	1776	1910	3.29	4.46	(-)26.2
Tripura	490	411	2.15	2.21	(-) 2.7
All the above States/ Union Territories	6391810	5357079&	6.13	5.24&	(+)13.1&

* Including employees in Defence Factories but excluding those in Railway Workshops.
& Estimated.

Source--Annual returns under the Payment of Wages Act, 1936.

APPENDIX—6.6

Authorised capital, paid up capital, turnover profit or loss of Government owned companies in 1965-66

<i>Sl. No.</i>	<i>Name of the company</i>	<i>Authorised capital Rs. in lakhs</i>	<i>Paid up capital Rs. in lakhs</i>	<i>Turnover Rs. in lakhs</i>	<i>Profit or loss Rs. in lakhs</i>
1	Trivandrum Rubber Works Ltd.	75.00	28.56	45.70	(+)1.31
2	Trivandrum spinning Mills Ltd.,	75.00	48.20	28.17	(—) 8.14
3	The Kerala Ceramics Ltd.	100.00	29.95	15.32	(—)9.09
4	Kerala Electrical and Allied Engineering Company Ltd.	25.00	3.00	16.00	(—) 1.66 (Approx) (for 7½ months)
5	Travancore Plywood Industries Ltd.,	15.00	3.51	14.06	(+)2.32
6	Kerala Soaps and Oils Ltd.	100.00	30.73	121.00	(+)0.29

APPENDIX—6.7

Details of the Industrial Co-operative Societies as on 30-6-1966

<i>Sl. No.</i>	<i>Name of the Society</i>	<i>Total No. in Kerala</i>	<i>Total Employment*</i>	<i>Working Capital (Rs. in lakhs)</i>	<i>Production (Rs in lakhs)</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	Weaver's Co-operative Society	404	23906	155.68	294.20
2	Coir	543	36095	196.04	36.54
3	Flaying and Tanning	8	31	2.03	0.45
4	Pottery	97	1911	24.57	3.08
5	Hand pounding of paddy and cereals	128	719	14.43	1.87
6	Oil crushing	193	14758	19.56	36.25
7	Palmgur	203	14408	7.52	4.21
8	Cane gur & Khandassary	26	343	3.17	1.26
9	Canning of fruits & Vegetable	10	21	1.67	0.18
10	Other village Industries	309	3802	23.51	9.89
11	Handicrafts	276	3508	12.45	8.14
12	General Engineering	100	852	19.81	12.36
13	Chemical Engineering	60	478	6.61	2.02
14	Leather goods	16	11	0.46	0.17
15	Construction Materials	46	453	7.97	3.08
16	Spinner's society	81	2130	8.66	7.08
17	Miscellaneous Industries	378	3216	20.56	16.89
18	Handloom Apex Society	1	250	32.69	1.62
19	Handicraft	1	24	2.49	..
Total		2830	106916	559.91	439.29

* Employment for production and Administration.

Existing large and medium Industries in the

1. Travancore Textiles Private Ltd., Nemom, Trivandrum
2. Travancore Titanium Products Ltd., Trivandrum✓
3. Trivandrum Rubber Works Ltd., Trivandrum✓
4. Vijaya Mohini Mills Ltd., Trivandrum.
5. Trivandrum Spinning Mills Ltd., Balaramapuram✓
6. Harison and Cross fields Ltd., Quilon.
7. Thomas Stephen Co., Ltd., Quilon
8. Parvathy Mills (P) Ltd., Quilon
9. F.X.P. Minerals Ltd., Chavara, Quilon.
10. Travancore Minerals Ltd., Chavara, Quilon
11. Kerala Premo Pipe Factory Ltd., Quilon✓
12. Lakshmy Starch Factory Ltd., Kundara
13. Aluminium Industries Ltd., Kundara
14. Kerala Ceramics Ltd., Kundara✓
15. Punalur Paper Mills Ltd., Punalur.
16. Travancore Plywood Industries Ltd., Punalur✓
17. United Electrical Industries Ltd., Quilon.
18. Kerala Electrical and Allied Engineering Co., (P) Ltd., Kundara.
19. Travancore Sugar and Chemicals Ltd., Thiruvella
20. M.C. Dowell & Co., Ltd., Sherthalai
21. Mannam Sugar Mills Co-operative Ltd., Pandalam
22. Pallathara Bricks & Tiles Ltd., Sherthalai-
23. Aspinwall & Co., (India) Ltd., Alleppey
24. Darragh Snail & Co., (India) Ltd., Alleppey
25. Shankar Paint & Oil Mills (P) Ltd., Alleppey
26. Phoneix Plywoods, Kottayam
27. Ruby Rubber Works Ltd., Changanacherry.
28. South India Plywood Industries, Kottayam
29. Travancore Cements Ltd., Kottayam✓
30. Travancore Electro-Chemical Industries Ltd., Chingavanam, Kottayam
31. Travancore Timber & Products, Kottayam
32. Aspinwall & Co., Ltd., Cochin
- ∴ Tata Oil Mills Co., Ltd., Tatapuram, Ernakulam
- ∴ Tata Fision Ltd., Ernakulam
- ∴ Fertilisers & Chemicals Travancore Ltd., Alwaye
36. Travancore-Cochin Chemicals Ltd., Alwaye
37. Indian Rare Earths Ltd., Alwaye
38. Hindustan Insecticides Ltd., Alwaye✓
39. Indian Aluminium Co. Ltd., Alwaye✓
40. Travancore Ogale Glass Manufacturing Co., Ltd., Alwaye
41. Chacolas Spinning & Weaving Mills Ltd., Alwaye
42. Asok Textiles Ltd., Alwaye
43. Travancore-Chemical and Manufacturing Co., Ltd., Alwaye
44. Forest Industries (Travancore) Ltd., Alwaye
45. Kathayee Cotton Mills Private Ltd., Alwaye
46. Seshasayee Wire Ropes Ltd., Alwaye
47. G.T.N. Textiles Ltd., Alwaye
48. Premier Tyres Ltd., Kalamassery
49. Travancore Rayons Ltd., Perumbavoor
50. Hindustan Machine Tools Ltd., Kalamassery
51. Anand Water Motor Manufacturing Co., Cochin
52. Goivanola Binny Ltd., Cochin
53. Traco Cable Co., Ltd., Trippunithura, Ernakulam
54. Standard Pottery Works Private Ltd., Alwaye
55. Southern Gas Ltd., Alwaye
56. Alagappa Textiles (Cochin) Ltd., Alagappanagar, Trichur
57. Vanaja Textiles Ltd., Trichur

- ...s Ltd., Trichur
 Mills Trichur
 ...ndia) Ltd., Koratty
 ...ables (P) Ltd., Trichur
 ...eel Re-rolling & Allied Industries (P) Ltd., Vadakkancherry
 ...r Cables, Karukutty
 ...ard Furniture Co., Ltd., Chhalakudy
 ...apioca Products, Chhalakudy
 ... Madras Spinners Ltd., Palghat
 67. Kunnar Industries, Edathara, Palghat
 68. South India Metal Co., Shoranur
 69. Metal Industries Ltd., Shoranur
 70. Sree Narayana Engineering Industries, Shoranur
 71. Premier Cotton Spinning Mills Ltd., Kanjikode, Palghat
 72. British Physical Laboratories India Private Ltd., Palghat
 73. Co-operative Sugar Ltd., Chittur, Palghat
 74. Techno-Chemical Industries Ltd., Calicut
 75. Vegetable Soap Works, Calicut
 76. Kerala Soaps and Oils Ltd., Kozhikode
 77. The Common Wealth Trust Ltd., Calicut
 78. Malabar Spinning & Weaving Mills Ltd., Calicut
 79. Standard Furniture Co., Ltd., Calicut
 80. Kerala Wheat Flour Roller Mills Ltd., Calicut
 81. Gwalior Rayon Silk Manufacturing (Weaving) Co., Ltd., Calicut
 82. West India Steel Co., Ltd., Calicut
 83. Calicut Modern Spinning & Weaving Mills Ltd., Calicut
 84. Khemka Flour Mills Private Ltd., Calicut
 85. New India Ceramics Ltd., Feroke, Calicut
 86. The Western India Plywoods Ltd., Baliapatam
 87. The Bharat Plywood & Timber Products (P) Ltd., Cannanore
 88. Cannanore Spinning & Weaving Mills Ltd., Cannanore
 89. Western India Cottons Ltd., Pappinisserri, Cannanore
 90. Aysa Hoisery Factory (P) Ltd., Palaparamba, Cannanore
 91. Purushotham Gokuldas Match Co., Dharmadam, Cannanore
 92. Cannanore Co-operative Spinning Mills Ltd., Cannanore
 93. Fibre Foam Factory, Baliapatam, Cannanore
 94. Sree Bhagavathy Textiles, Cannanore
 95. Kerala Spinners Alleppey
 96. Thiruvepathy Mills
 97. English Indian Clays Ltd., Trivandrum
 98. Carborandum Universal Edappally
 99. Welding Electrodes, Trivandrum
 100. Cochin Refinery, Ambalavayal
 101. Cominco Binani, Zinc Ltd., Alwaye
 102. Cochin Roller Flour Mills Kalamasseri
 103. Poyshar Industries Ltd., Cochin
 104. Toshiba Anand Lamps Ltd., Angamati
 105. Trichur Cotton Mills, Nattika

APPENDIX—6.9

Industries that sought Loan Assistance from Kerala Finance Corporation during 1964-65 to 1966-67

Sl.No.	Industrial Units	Year			Total
		1966-67	1965-66	1964-65	
1	Textiles	4	6	5	15
2	Chemicals	1	1	1	3
3	Engineering	2	1	2	5
4	Cables	1	..	..	1
5	Rubber	..	1	1	2
6	Clay	..	..	..	1
7	Vegetable Oils	..	1	..	1
8	Processed foods	1	..	..	1
	Total	9	10	10	29

APPENDIX—6.10

Industrywise Classification of loan Disbursed by the Kerala Financial Corporation during the Year ended 31-3-1967

Sl. No.	Type of Industries	Number	Amount disbursed during the year ended 31-3-1967
1	Food manufacturing Industries except beverage Industries	..	200000
2	Cold storage	2	1575000
3	Paper Board and straw Board	..	383080
4	Rubber footwear	1	825000
5	Heavy chemicals	1	2000000
6	Soaps and Glycerine	..	100000
7	Matches	..	120000
8	Chinaware-Pottery	1	542000
9	Agricultural Machinery	..	110000
	Total	5	5855080

APPENDIX—6.11

Industrywise Classification of Amount Disbursed to Small Scale Industries by the Kerala Financial Corporation under the Agency Agreement with the Government of Kerala during the year ended 31-3-1967

<i>Sl. No.</i>	<i>Type of Industry</i>	<i>Number</i>	<i>Amount disbursed during the year ended 31-3-1967</i>
1	Automobile Engineering ..	..	197.00
2	Brass and Metal Industries ..	1	5000.00
3	Carpentry work shops and furniture mart if furniture is manufactured and marketed by the mart ..	2	100150.20
4	Electrical appliance and manufacture ..	2	74500.00
5	Engineering manufacturing Industries ..	3	181081.95
6	Foundries ..	1	20097.70
7	Ice Factory ..	1	143000.00
8	Manufacture of splints and Veneers ..	— 1	49000.00
9	Manufacture of wire nails parliamentary hinges and screw rings ..	1	16000.00
10	Manufacture of water proof textile products such as oil cloths, Tarpaulin, raw coat etc., ..	..	132.00
11	Pharmaceutical Industry ..	..	134.00
12	Printing ..	2	143724.30
13	Plastic Industry ..	2	47200.00
14	Rubber dipped goods and moulded goods ..	2	73500.50
15	Soap manufacture ..	1	95000.00
16	Solvent Extraction Industry ..	..	658.55
17	Coir mats and matting industry outside the co-operative fold ..	2	157900.00
18	Umbrella Manufacture and fittings ..	1	26000.00
19	Manufacture of cement articles ..	1	25000.00
20	Manufacture of rubber crepe sole ..	1	5500.00
21	Power laundry and Dry cleaning Industry ..	2	125400.00
22	Ayurvedic Medicine Manufacturing Industry ..	1	57000.00
23	Cashew Industry (Procuring and packing in consumer packets, ..		99900.00
24	Tile manufacturing industry ..	..	747.00
25	Industries not included in the revised list ..	..	1152.10
	Total	.. 27	1497975.65

TABLE No.—6.12

Number of Factories registered, number of persons employed, productive capital, output, net value added etc., from 1961 to 1965 for Kerala and All India

	1961		1962		1963		1964		1965	
	<i>Kerala</i>	<i>India</i>	<i>Kerala</i>	<i>India</i>	<i>Kerala</i>	<i>India</i>	<i>Kerala</i>	<i>India</i>	<i>Kerala</i>	<i>India</i>
No. of factories Registered	554	9161	538	9784	546	10348	593	12232	629	13459
Productive-capital (Rs. in lakhs)	4666.38	237415.08	5646.43	343681.76	6687.45	407527.95	7407.10	527501.00	8314.92	630042.00
No. of persons Employed	139806	3049736	137208	3267648	143692	3447853	145763	3797573	154348	3953184
Wages & salaries Total	1208.19	53573.09	1350.16	62785.57	1461.28	70168.99	N.A.	N.A.	N.A.	N.
Gross output (Rs. in lakhs) Factory value	8423.22	369332.77	9034.05	417645.49	9954.28	479930.51	11086.98	562633.00	12994.42	641962.00
Value added by Manufactured (Rs. in lakhs)	2386.80	98790.90	2542.98	111560.72	2666.28	129569.07	2939.63	150279.00	9310.51	168654.00

N.A.—Not Available.

APPENDIX—6.13

The production and export of Rutile and Monozite 1960-67

<i>Year</i>	<i>Rutile</i>		<i>Monozite</i>	
	<i>Production</i>	<i>Export</i>	<i>Production</i>	<i>Export</i>
1	2	3	4	5
1960	982	1053	76	25
1961	818	775	140	56
1962	1603	1753	86	137
1963	1767	1722	..	..
1964	1870	1393	87	50
1965	1816	1327	162	204
1966	1823	1067	208	120
1967	1291	182	169	80

APPENDIX—6.14

Production and sale of different varieties of clay in 1966 and 1967

<i>Clay</i>	<i>Production (In Tonnes)</i>				<i>Sales (In Tonnes)</i>			
	<i>Raw</i>		<i>Processed</i>		<i>Raw</i>		<i>Processed</i>	
	1966	1967	1966	1967	1966	1967	1966	1967
Quartz	14817	48	6321	599	..	48	6423	599
China Clay	52144	13037	4433	4877	51045	13037	3184	..
Tile clay	24640	69308	10515	10992	20793	62761	10720	8744
File clay	99	440	22	345	40	223	4	..
Ball clay	444	576	..	..	350	458	..	180

TABLE—7.1

Statistics relating to Kerala Power system as on 31-3-1967

Description	At the beginning of				Achievement during 1966-67	Target for fourth Plan 1970-73
	First Plan	Second Plan	Third Plan	Fourth Plan		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Centres electrified	158	902	1849	1935	34	500
2 Consumers	28119	79575	174993	324111	24620	130000
3 Street lights installed	7905	25489	82645	106996	9023	20000
4 Generation capacity (K. W.)	28500	85500	147500	192500	168000	806000
5 Maximum demand (K. W.)	24400	62900	125700	187700	212000	555000
6 Units Generated (million units per annum)	150.98	349.78	581.82	842.00	1083.11	3088
7 Units purchased	16.84	1.46	50.34	116.48	77.99	..
8 Pucha load (K. W.)	8700	12057	20111	38208	16734	..
9 Total connected load (K. W.)	69569	142353	308015	509851	116259	..
10 Per Capita consumption per annum (units)	13.00	18.50	30.10	44.57	47.28	..

APPENDIX—8.1

Statement showing the number of motor vehicles in the State as on 31-3-1967

District	Goods vehicles	State carriages	Taxi cabs	Cars	Motor cycles	Auto- rickshaws	Tractor- Trailer	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Trivandrum	1074	1195	600	3133	917	4	88	197	7208
2. Quilon	843	233	653	1661	488	..	26	3	3907
3. Alleppey	523	338	522	1709	609	6	32	7	3746
4. Kottayam	1287	768	330	2984	616	26	130	87	6344
5. Ernakulam	1738	423	868	4621	1665	84	32	..	9451
6. Trichur	819	414	733	2089	693	..	16	..	4764
7. Palghat	685	329	463	1454	431	20	297	..	3679
8. Kozhikode	1623	497	343	2819	744	132	109	79	6346
9. Cannanore	798	361	275	1781	305	178	65	..	3763
TOTAL	9390	4558	5013	22161	6468	450	795	373	49208

Source : Office of the Transport Commissioner, Trivandrum

APPENDIX—8.2

Routes and distances and number of passengers

District	No. of routes as on		Route k.m. as on		Gross distance Operated during		No. of passengers carried as	
	31-3-1966	31-3-1967	31-3-1966	31-3-1967	1965-66 (000 k.m.)	1966-67 (000 k.m.)	1965-66 (*000)	1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum Central	152	160	6013	7143	15222686	15757113	32897442	39487304
Trivandrum City	252	308	2808	3678	5965318	6641940	34276444	40424900
Quilon	28	32	1545	1870	5385775	6051738	14436911	16795437
Kottarakara	35	37	1199	1277	3481335	3677683	9566863	11050836
Kottayam	41	59	2133	3335	8818080	10397719	18075884	22468676
Alleppey	32	32	1426	1599	6627128	7125762	17262248	20544762
Ernakulam	21	23	1196	1244	3953492	4592194	7944038	9555752
Alwaye	32	37	681	1237	5064571	4564683	13102326	15827383
Trichur	12	13	1045	1195	4125709	4567507	6560905	7519624
Kozhikode	13	15	2427	2520	5256358	5907395	4406892	5481837
Works shops & other offices	..	..	..	..	281429	258676	..	..
TOTAL	600	695	19878	23231	64181873	69942410	158529953	189156511

Source : Office of the State Transport Corporation, Trivandrum,

APPENDIX—8.3

Revenue and expenditure of the Transport Corporation
(Rs. in lakhs)

<i>Item</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Net surplus</i>
1	2	3	4
1960-61	294.18	284.01	+10.17
1961-62	361.95	330.39	+31.56
1962-63	434.20	394.70	+39.50
1963-64	476.90	448.26	+28.64
1964-65	553.88	529.68	+24.10
1965-66	631.21	590.66	+40.55
1966-67	751.66	727.54	+24.12

Source:—State Transport Corporation, Trivandrum.

APPENDIX—8.4

**Revenue and expenditure statement of the water transport
section of the State Transport Corporation**
(Rs. in lakhs)

<i>Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Net surplus</i>
1	2	3	4
1960-61	5.80	7.50	(—) 1.70
1961-62	5.36	7.30	(—) 1.94
1962-63	5.83	7.55	(—) 1.72
1963-64	6.06	7.86	(—) 1.80
1964-65	6.92	9.45	(—) 2.53
1965-66	8.78	9.30	(—) 0.51
1966-67	9.71	10.39	(—) 0.68

Source:—State Transport Corporation, Trivandrum.

APPENDIX—9.1

Foreign Exports from the Ports of Kerala

(Value in lakhs of rupees)

No.	Commodity	Unit	1961-62		1964-65		1965-66		1966-67*	
			Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	Cardamom	Tonnes	405.49	66.82	260.89	47.25	295.52	61.83	482.63	233.04
2	Cashew Kernels	"	41637.65	1691.08	51625.17	2794.05	48625.98	2602.45	49464.60	4352.05
3	Cashew shell liquid	"	5953.64	57.41	13019.99	204.07	12250.01	171.67	9446.77	167.42
4	Coffee	"	5630.02	146.82	10496.45	441.83	9679.27	443.38	13406.39	788.57
5	Coir and Coir products	"	75277.62	1096.29	71552.63	1074.93	63488.30	1018.89	62012.06	1491.08
6	Marine Products including froglog [†]	"	6498.60	258.54	10680.15	574.17	10356.73	735.66	13099.42	1519.23
7	Ginger	"	5214.83	84.00	2683.25	99.19	2683.66	82.83	2451.98	82.91
8	Lemon grass oil	1000 litres	995.61	276.38	1109.19	132.78	296.04	38.43	362.21	84.08
9	Pepper	Tonnes	20928.26	757.90	18417.91	750.70	24477.06	1027.37	20020.01	1127.63
10	Tea	"	36007.42	1987.19	40577.37	2178.27	45254.10	2209.63	38420.62	2873.00
11	Oilcake	"	1338.80	4.03	3865.00	13.05	1578.00	5.91	477.00	1.33
12	Copra	"	..	..	..	..	..	..	483.00	2.48
13	Rubber manufacturers	"	0.18	0.57	19.74	1.44	N.A.	16.19	N.A.	30.46
14	Wood & Timber	"	N.A.	239.61	N.A.	163.97	N.A.	138.33	N.A.	266.56
15	Sundries	"	..	882.27	..	585.00	..	452.89	..	734.30
	Total		..	7549.15	..	9060.70	..	9005.46	..	13754.14

*Source : D.G.O.I. & S. Government of India."

† Subject to revision

APPENDIX—9.2

Foreign Import in to the Ports of Kerala

(Value in lakhs of rupees)

No.	Commodity	Unit	1961-62		1964-65		1965-66	
			Qty.	Value	Qty.	Value	Qty.	Value
1	Cotton raw & waste	..	15233.00	617.19	13143.00	558.31	6186.00	296.14
2	Cotton piece goods	Metres			6.69	1.43		
3	Copra	Tonnes	19302.00	173.32	4730.00	49.85	10475.00	128.10
4	Fruits & vegetables including Cashewnut	..	..	591.64	..	1457.96	..	1662.70
5	Grains & pulses including Rice & Wheat	Tonnes	34647.00	162.14	485033.00	2068.17	596150.00	3097.25
6	Drugs & Medicines	..	74266.00	1.30		2.55		0.3
7	Manure	Tonnes	27948.00	119.94	97818.00	211.56	191249.00	358.71
8	Metals, minerals & ores	..	4022.23	335.91	N.A.	801.87	21234.00	322.72
9	Mineral oil	Lakhs '000 litres.	N.A.	537.40	1369.08	229.24	N.A.	N.A.
10	Other vegetable oil	..		131.11	2174.00	26.41	1573.00	37.03
11	Chemicals including sulphur	..		102.12		155.82		137.67
12	Coal coke & Pitch	Tonnes	5401.00	17.05	6405.00	17.83	N.A.	0.81
13	Liquers	'000 litres	23.81	1.50	63.30	3.65	32.57	1.56
14	Paper and paste Board	Tonnes	7088.00	57.51	7382.00	57.44	8437.00	65.48
15	Silk manufacturers	..	..	..	..	4.32	..	4.10
16	Tobacco manufacturers & unmanufacturers	..	..	..	..	..	..	..
17	Wood pulp	Tonnes	173.00	7.28			0.22	0.06
	Sundries	..	8954.50	73.22	8185.00	80.81	4043.00	46.31
	G. Total	..	..	1129.66	..	1464.65	..	1164.36
		..	..	4058.29	..	7191.87	..	7323.38

Subject to revision

APPENDIX—10.1

Literacy rates in the various States - 1961

States	Percentage of Literates		
	Men	Women	Persons
(1)	(2)	(3)	(4)
1. Andhra Pradesh	30.2	12.0	21.2
2. Assam	37.3	16.0	27.4
3. Bihar	29.8	6.9	18.4
4. Gujarat	41.1	19.1	30.5
5. Jammu & Kashmir	17.0	4.3	11.0
6. Kerala	55.0	38.9	46.8
7. Madhya Pradesh	27.0	6.7	17.1
8. Madras	44.5	18.2	31.4
9. Maharashtra	42.0	16.8	29.8
10. Mysore	36.1	14.2	25.4
11. Orissa	34.7	8.6	21.7
12. Punjab	33.0	14.1	24.2
13. Rajasthan	23.7	5.8	15.2
14. Uttar Pradesh	27.3	7.0	17.6
15. West Bengal	40.1	17.0	29.3
16. India	34.4	12.9	24.0

APPENDIX—10.2

Literacy in Kerala by Districts - 1961 (In lakhs)

District	1961 (actuals)					
	Male	% to the total male population	Female	% to the total female population	persons	% to the total population
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	4.64	53.3	3.27	37.3	7.91	45.3
2. Quilon (4)	5.62	57.8	4.18	43.2	9.80	50.5
3. Alleppey (1)	5.70	63.8	4.60	50.1	10.30	56.9
4. Kottayam (2)	5.51	62.4	4.29	50.5	9.80	56.6
5. Ernakulam (3)	5.38	57.8	4.02	43.3	9.40	50.6
6. Trichur (5)	4.33	55.2	3.62	42.3	7.95	48.5
7. Palghat	3.59	42.1	2.46	26.6	6.05	34.1
8. Kozhikode	6.65	51.1	3.98	30.2	10.63	40.6
9. Cannanore	4.54	52.0	2.81	31.0	7.35	41.3
10. State	45.96	55.0	33.23	38.9	79.19	46.9

APPENDIX—10.3

**Per capita Government Expenditure on Education in Kerala
1957-58 to 1966-67**

<i>Year</i>	<i>Per capita Expenditure</i>
(1)	(2)
1957-58	6.30
1958-59	8.14
1959-60	8.92
1960-61	9.56
1961-62	10.70
1962-63	10.75
1963-64	11.56
1964-65	12.35
1965-66	15.19
1966-67	18.48

APPENDIX—10.4

Per capita Govt. Expenditure on Education in various States—1966-67

<i>States</i>	<i>Per capita Expenditure</i>
(1)	(2)
1. Andhra Pradesh ..	7.98
2. Assam ..	10.55
3. Bihar ..	4.29
4. Gujarat ..	8.95
5. Jammu & Kashmir ..	14.56
6. Kerala ..	18.48
7. Madhya Pradesh ..	8.68
8. Madras ..	11.97
9. Maharashtra ..	9.01
10. Mysore ..	10.60
11. Orissa ..	7.02
12. Punjab & Hariyana ..	12.91
13. Rajasthan ..	9.28
14. Uttar Pradesh ..	5.54
15. West Bengal ..	9.14

APPENDIX—10.5

**Government Expenditure for General School Education in
Kerala—1961-62 to 1966-67**

<i>Year</i>	<i>Expenditure for General school education (Rs. in crores)</i>	<i>Percentage to total Govt. expenditure on education</i>
(1)	(2)	(3)
1961-62	16.83	91
1962-63	17.11	89
1963-64	18.46	88
1964-65	19.88	86
1965-66	25.23	91
1966-67 (Revised Estimates)	30.18	85

APPENDIX—10.6

Schools in Kerala for General Education by Type of Management—1957-58 to 1967-68

Year	Lower Primary Schools (including J. B. S.)			Upper Primary Schools (including S. B. S.)			High Schools (including P. B. S.)			All Schools		
	Govt.	Pvt.	Total	Govt.	Pvt.	Total	Govt.	Pvt.	Total	Govt.	Pvt.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1958-59	2794	3984	6778	528	1363	1891	242	631	873	3564	5978	9542
1959-60	2787	3974	6761	533	1374	1907	245	624	879	3565	5972	9537
1960-61	2719	3987	6706	530	1402	1932	244	644	888	3493	6033	9526
1961-62	2823	3910	6745	576	1409	1985	276	653	929	3687	5972	9659
1962-63	2985	3919	6904	711	1574	2285	312	701	1013	4008	6194	10202
1963-64	2928	3991	6919	705	1581	2286	315	705	1020	3948	6277	10225
1964-65	2898	4032	6930	758	1680	2438	345	801	1146	4001	6513	10514
1965-66	2904	4050	6954	761	1686	2447	345	806	1151	4010	6542	10552
1966-67	2864	4089	6953	777	1696	2473	391	884	1275	3852	6669	10521
1967-68	2864	4076	6940	776	1693	2469	395	887	1282	3855	6656	10511

APPENDIX—10.7

Standardwise strength of pupils in Kerala 1965-66 and 1966-67

<i>Standard</i>	1965-66	1966-67*
(1)	(2)	(3)
I	756337	789821
II	669189	674357
III	574931	629918
IV	520725	551475
Sub-Total I—IV	2521182	2645571
V	405669	441869
VI	334823	354380
VII	291019	303362
Sub-Total V—VII	1031511	1099613
VIII	248127	272888
IX	210760	227171
X	156256	159706
Sub-Total VIII—X	615143	659765
Grand Total	4167836	4404949

*Provisional

APPENDIX—10.8

Number of Teachers' Training Schools, Intake Capacity and Number of seats per 100,000 of population 1966-67

<i>District</i>	<i>No. of Teachers' Training Schools</i>			<i>Intake Capacity</i>		
	<i>Public</i>	<i>Private</i>	<i>Total</i>	<i>Public</i>	<i>Private</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	3	6	9	400	400	800
2. Quilon	2	13	15	160	840	1000
3. Alleppey	4	14	18	400	640	1040
4. Kottayam	3	10	13	280	640	920
5. Ernakulam	4	12	16	400	640	1040
6. Trichur	3	7	10	240	480	720
7. Palghat	3	4	7	280	280	560
8. Kozhikode	5	5	10	480	360	840
9. Cannanore	4	3	7	520	160	680
10. State	31	74	105	3160	4440	7600

APPENDIX—10.9

Polytechnics (excluding women's polytechnics) in Kerala 1967-68

<i>District</i>	<i>No. of Polytechnics</i>			<i>Intake capacity (sanctioned)</i>		
	<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	2	..	2	210	..	210
2. Quilon	..	1	1	..	180	180
3. Alleppey	..	2	2	..	360	360
4. Kottayam	1	..	1	120	..	120
5. Ernakulam	1	..	1	260	..	260
6. Trichur	1	2	3	180	300	480
7. Palghat	2	..	2	150	..	150
8. Kozhikode	1	1	2	330	120	450
9. Cannanore	1	1	2	150	60	210
10. State	9	7	16	1400	1020	2420

APPENDIX—10.10

Industrial Training Institutions in Kerala—1967-68

<i>District</i>	<i>No. of I.T.Is.</i>			<i>Intake capacity</i>		
	<i>Govt.</i>	<i>Pvt.</i>	<i>Total</i>	<i>Govt.</i>	<i>Pvt.</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	2	4	6	1400	320	1720
2. Quilon	1	2	3	580	240	820
3. Alleppey	1	7	8	532	612	1144
4. Kottayam	1	3	4	540	192	732
5. Ernakulam	1	7	8	808	320	1128
6. Trichur	1	..	1	912	..	912
7. Palghat	1	..	1	748	..	748
8. Kozhikode	1	1	2	352	16	368
9. Cannanore	1	1	2	732	32	764
10. State	10	25	35	6604	1732	8336

APPENDIX—10.11

Nursing Schools in Kerala—1967-68

District	General nursing course						Auxiliary Nurse mid-wifery course					
	No. of General Nursing Schools		Intake capacity		No. of Aux. Nurse midwifery Schools		Intake capacity					
	Govt.	Pvt.	Total	Govt.	Pvt.	Total	Govt.	Pvt.	Total	Govt.	Pvt.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Trivandrum	2	..	2	140	..	140	2	2	4	35	30	65
2. Quilon	1	1	2	40	25	65	1	1	2	25	15	40
3. Alleppey	1	2	3	35	27	62	1	3	4	25	45	70
4. Kottayam	1	2	3	50	25	75	1	2	3	30	28	
5. Ernakulam	1	2	3	92	30	122	1	..	1	25	..	
6. Trichur	1	1	2	50	15	65	1	..	1	30	..	
7. Palghat	1	..	1	45	..	45	..	..	..	..	..
8. Kozhikode	1	..	1	40	..	40	1	..	1	25		
9. Cannanore	..	..	..	..	..	..	1	..	1	30		
10. State	9	8	17	492	122	614	9	8	17	225		